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ABSTRACT

This curriculum guide contains 14 units for a course on nursing principles and skills needed by practical nurses. The 14 units of instruction cover the following: (1) using medical terminology; (2) practicing safety procedures; (3) using the nursing process for care planning; (4) using infection control techniques; (5) preparing a patient environment; (6) completing documentation; (7) providing personal care; (8) providing for patient movement; (9) providing for urinary elimination; (10) providing for bowel elimination; (11) assessing vital signs; (12) assessing the patient; (13) applying heat and cold applications; and (14) providing care for patients requiring respiratory assistance. Each unit contains some or all of the following components: objective sheet, suggested activities, information sheet, instructional supplement, assignment sheet, job sheet, handouts, transparency masters, activity sheets, written test, and answers to assignment sheets and written test. Units are designed to be used for more than one class period. Academic skills training is combined with vocational training throughout the instructional materials. To assist teachers in identifying activities that promote basic skills development, a marking system of simple graphic symbols, or icons, is used to denote which of the following nine general basic skill categories is being emphasized: reading, science, creative thinking/problem solving, writing, oral communication, employability, math, interpersonal skills, and social studies. (KC)

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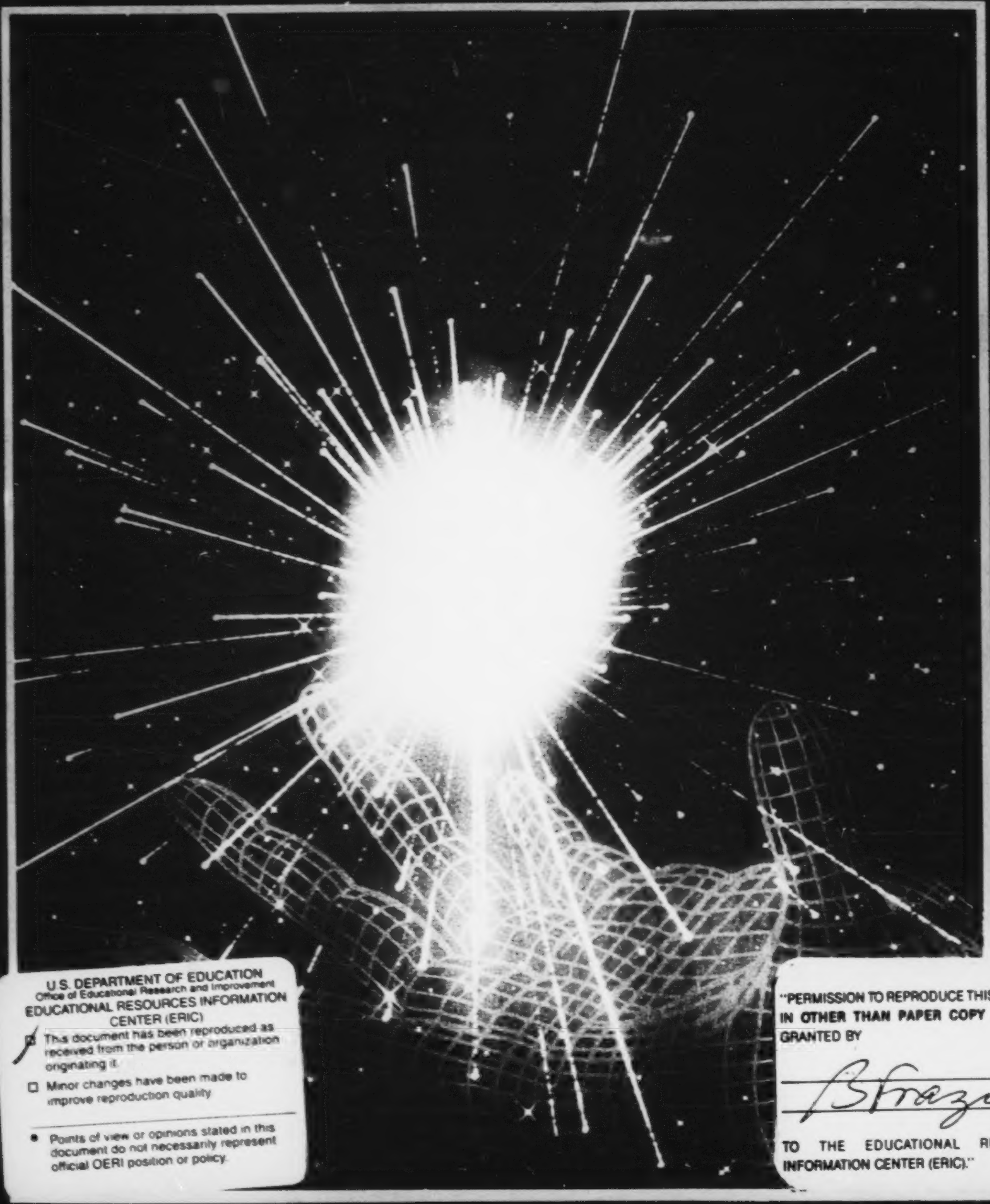
Nursing Principles & Skills



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Teacher Edition

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Nursing Principles and Skills

Teacher Edition

Developed by the
Curriculum and Instructional Materials Center
for the Division of Health Occupations Education
Oklahoma Department of Vocational and Technical Education

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The Oklahoma Department of Vocational and Technical Education does not discriminate on the basis of race, creed, color, national origin, sex, age, veteran status, or qualified handicap.

NURSING CONCEPTS

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FOREWORD

This publication is one of ten comprehensive courses from the Practical Nursing series of competency-based curricula developed by the Curriculum and Instructional Materials Center. It is designed to prepare students for employment by systematically guiding the student's learning activities from the simple to the complex.

A major challenge in the development of these materials has been to identify content and learning activities which will prepare health care practitioners who can function effectively in the rapidly changing health care industry. To meet this challenge, we have relied heavily upon the input and support of health care industry professionals.

The information found in each of the courses in the Practical Nursing series will help the instructor plan and implement a systematic learning process which will ensure student mastery of specific outcomes. Although we believe these publications do provide a systematic, functional curricula, instructors are encouraged to localize, individualize and supplement these materials to meet specific student/client needs.

Roy Peters, Jr.
State Director

Gail Pearson
State Supervisor
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PREFACE

This publication is a result of our belief that each student *can learn* and reach occupational competency when given enough time and instruction. The information included in this guide (its scope) is based on the competencies identified by a committee of health care industry professionals. The intention of those who gave their time, talent and knowledge in developing this learning package was to produce competent health care professionals.

To be competent, health care workers must be able to *perform* certain tasks. Knowledge without performance is of little value. Each unit provides students with opportunities to apply the information presented through practice performance. We believe that students completing this portion of the practical nursing curriculum and mastering each task will become truly competent health care providers.

Sherry Wietelman, M.S.
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ACKNOWLEDGEMENTS

The Curriculum and Instructional Materials Center (CIMC) extends its appreciation to those individuals who played important roles in the development of *Nursing Principles and Skills*.

A generous thank you is extended to the professional individuals who served on the *Nursing Principles and Skills* curriculum task analysis and validation committees. Their contributions of time, talent, and knowledge in determining the content of this publication are greatly appreciated.

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Thank you is also extended to the vocational educators who served on the *Nursing Principles and Skills* curriculum committees. Their expert input on vocational instructional methods is greatly appreciated.

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We also thank the State Director, Dr. Roy Peters, Jr., and Assistant State Director, Dr. Charles O. Hopkins, for their continued support throughout this project.

Oklahoma Department of Vocational and Technical Education Health Occupations Education staff who provided leadership and direction on this project also deserve special recognition.

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Special recognition goes to the writer, Vivian Bingman. In addition to her full-time teaching responsibilities and involvement in HOSA activities at Mid-Del AVTS, she tackled one of the most important areas in the practical nursing curriculum and did an incredible job. A big "thank you" goes to Vivian.

A hearty thank you goes to Sandra Williams and Ann Johnson for their editing work on this publication, and to Billie Frazier, Copy Specialist, for her help with all the copyright questions.

Special thanks go to Sulinda Moffett, Executive Director and Dr. Charlotte Rappsilber, former Associate Director of Nursing Education at the Oklahoma Board of Nursing, Oklahoma City, Oklahoma and to Dr. Lou Ebrite, Teacher Educator, University of Central Oklahoma, Edmond, Oklahoma for their support and encouragement.

Only through the close cooperation of the Curriculum and Instructional Materials Center staff was this curriculum developed. Sincere thanks are shared with the CIMC coordinators.

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Special appreciation is offered to the numerous other individuals on the CIMC staff who functioned in supportive roles throughout the development of the *Nursing Principles and Skills* curriculum: Terri Tomson, CIMC Secretary and Charlotte Tarkington, Permissions Secretary.

Special recognition and thanks are also extended to other individuals within the Oklahoma Department of Vocational and Technical Education involved in the development process: Rose Primeaux, Vicki Marton, and Margie Kirkendall in the Word Processing Center; Noel Wilcoxson, Frosty Foster, Diane Ensign and Danny Darrow and the staff at the ODVTE Print Shop; and Bob Davis and the artists in the ODVTE Art Department.

Finally, a big thank you to all the other curriculum development specialists and technical writers who offered both their technical and moral support during this project.

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USE OF THIS PUBLICATION

INSTRUCTIONAL UNITS

Nursing Principles and Skills contains fourteen units. Each instructional unit includes basic components that form a unit of instruction: performance objectives, suggested activities, information sheets, assignment sheets and their answers or job sheets and their practical tests, written tests, and written test answers. Handouts, supplements, transparency masters, and activity sheets are optional components which may be included in some or all of the units. Transparency masters, handouts, instructional supplements and written tests are included in the instructor edition only. Test packets may be purchased in Oklahoma by calling 800-522-5810. Out-of-state instructors may order test packets by calling 800-654-4502.

The unit components focus on measurable and observable learning outcomes. When applicable, units include activities that use the affective domain. Instructors are encouraged to supplement, personalize, localize, and motivate with these materials in order to develop a complete teaching/learning process.

Units of instruction are designed for use in more than one lesson or class period of instruction. By carefully studying each unit of instruction, the instructor will be able to plan presentations and demonstrations to meet the needs of the students as well as determine the following:

- Amount of material to cover in a single class period
- Skills that must be demonstrated
    - Supplies and equipment needed
    - Amount of class time for demonstrations
    - Amount of class time for student practice
- Supplementary materials to order, such as pamphlets, videos or software
- Resource people to contact

Objective Sheets (White Pages)

Each unit of instruction is based on the knowledge and skills needed for successful employment in an occupational area. What the student must know and be able to do has been translated into performance objectives which are stated in two forms. **Unit objectives** state the subject matter to be covered in a unit of instruction, what the student should be able to do and what standard will be used to determine whether the student has achieved competency. **Specific objectives** outline the teaching sequence and state the performance necessary to meet the unit objective.

The objectives can also help determine teaching strategies and instructional methods. Instructors will need to decide how each objective can best be taught to *their* students prior to teaching the unit. Instructors should feel free to modify, delete, or add objectives in order to meet the needs of the students and community. If objectives are added, the instructor should remember to supply the needed information, assignment sheets, job sheets, and criterion test items.

Suggested Activities (Pink Pages) — **Instructor's Edition Only**

This component assists the instructor during the preparation stage of the teaching/learning process by providing suggestions for delivery, enrichment, and application during the instructional process. Teaching suggestions are included for each objective. The instructor should read the suggested activities before teaching the units to allow time to obtain supplemental materials, prepare audiovisual materials, and contact outside resources. Duties of the instructor will vary according to the particular unit.

Included in this component are suggested resources of additional information audiovisual materials, and software which may be used to teach the unit. Unit references used in the development of each unit are also provided. Instructors can use suggested resources and unit references to supplement their knowledge of the subject or to help students with particular interests or occupational objectives in the subject area.

Handouts (White Pages) — **Instructor's Edition Only**

Handouts are additional teaching aids that support portions of the information sheet by providing "nice-to-know" information which is not testable. They may include activities such as games, puzzles or supplementary information on subjects that are considered to be controversial. The instructor may decide whether to duplicate and use handouts in teaching the unit.

Information Sheets (Green Pages)

The information sheets provide "must know" content that is essential for meeting the cognitive objectives. The information sheets serve as an excellent guide for presenting background knowledge necessary to develop the skills specified in the unit objective.

Students should read the information sheets before the information is discussed in class. Space is provided in margins for students and instructors to add notes that supplement, localize, personalize, or provide motivation for each unit. Program coordinators, directors and/or instructors are encouraged to select and require textbooks for students in order to supplement and expand the material covered in the information sheets.

The information sheets may include notes, cautions, or warnings. These should be discussed carefully and thoroughly. **Notes** are short verbal additions to the information that provide nice-to-know and decision-making information. A note may tell the student what to look for or consider at a given step, or may explain when a step may not be applicable.

Notes offer guidance that may help the student understand the process and accomplish it more efficiently. **Cautions** are advisories that alert students to possible dangers to themselves or others. **Warnings** are advisories that alert the student to possible danger to equipment or facilities.

Supplements (Green Pages)

Supplements include material that provides additional information for understanding the topic but may not have direct application to specific objectives. Instructions that might be used for solving problems, tables, charts, written information, forms, or other information students might need in order to complete one or more of the assignment or job sheets could be included as a supplement. While supplements are not tested over directly, they may be used to assist the student in meeting the performance objectives.

Transparency Masters (White Pages)—**Instructor's Edition Only**

Transparency masters provide information in a special way. They direct attention to the topic of discussion and allow the instructor to illustrate the topic. The use of transparencies is especially effective for visual learners who prefer to see the topic being presented as well as hear about it. Transparencies may present new information or they may reinforce information presented in the information sheets.

Transparencies should be made ahead of time and placed with the rest of the materials necessary to teach the unit.

Activity Sheets (Tan Pages)

Activity sheets provide activities which support several objectives or deal with students' attitudes, beliefs or appreciation of the study area. Some may ask rather personal questions and are only intended for each student's personal use while other activity sheets may require the student to monitor his or her own actions or other personal variables over a period of time. Activity sheets will vary greatly in their design from unit to unit. Answer sheets may or may not be provided.

Assignment Sheets (Tan Pages)

Assignment sheets are written exercises that provide practice of a specific occupational task. The introduction to the assignment sheet explains how the assignment sheet relates to the subject area and unit objectives and may provide instructional information or refer students to another component for such information.

Assignment sheets are intended to provide students with practice in exercising higher-order thinking skills. Often, assignment sheets will contain case studies, story problems, or other situations in which the student must analyze the circumstances and determine correct responses. Students may be given assignment sheets in class or as homework.

Instructional Supplements (Pink Pages) — **Instructor's Edition Only**

Instructional Supplements provide suggestions for teaching the basic skills included in each activity sheet, assignment sheet, or job sheet.

Assignment Sheet Answers (Pink Pages) — **Instructor's Edition Only**

This component is designed to assist the instructor in evaluating student performance on assignment sheets.

Job Sheets (Blue Pages)

Job sheets provide a list of equipment, tools, and materials needed to complete a manipulative or psychomotor skill. They describe a step-by-step procedure to complete each task or job. Diagrams, photographs, and illustrations may be included to assist students in achieving the skill.

The instructor should demonstrate the procedures outlined in each job sheet. Furthermore, the instructor needs to localize the procedure according to the equipment and supplies available in the local lab situation. Job sheets also show potential employers what skills the students are learning and the performances they might reasonably expect from students who have had this vocational instruction.

Practical Tests (Yellow Pages) — **Instructor's Edition Only**

The practical tests assist the instructor in evaluating the psychomotor activities (Job Sheets). They provide instructors with a valid mechanism for determining a student's level of ability to perform the procedure stated on the job sheet and a means of evaluating the student's final product.

Written Tests (Yellow Pages) — **Instructor's Edition Only**

This component provides criterion-referenced evaluation of every objective listed in the unit of instruction. All performance objectives, including those in the information sheets, assignment sheets, and job sheets must be evaluated. If objectives have been added, deleted, or modified, appropriate changes should be made on the test. The written test component should function as both the Pretest and the Posttest.

The tests may be written or oral. It may be advisable to divide the tests into shorter tests covering three or four objectives at a time and give them soon after those objectives are covered.

The acceptable response on a written test, eighty-five (85) percent in most units, applies to the overall score, not to each individual question. The final unit grade should be obtained by combining written test and assignment sheet scores with evaluation ratings for students' demonstrations of tasks.

Written Test Answers (Pink Pages) — **Instructor's Edition Only**

This component is designed to assist the instructor in evaluating student performance on written tests.

PAGE NUMBERING

Each CIMC publication is assigned a specific abbreviation or can be recognized by the book title. *Nursing Principles and Skills* will be referred to by title. Each unit is identified by the unit number in Roman numerals followed by the page number. The first page of each unit is always page 1. The component name, book title, unit number, and page number within the unit are printed at the bottom of each page. An example of the page footer for an objective sheet in *Nursing Principles and Skills* is shown below.

OBJECTIVE SHEET - Nursing Principles and Skills
I - 1

METHODS OF DISSEMINATING MATERIAL

Each student should be provided with a student workbook. Workbooks may be purchased for less than an instructor can reproduce them, especially when the instructor's time is considered. Student workbooks contain everything but the suggested activities, handouts, transparency masters, assignment sheet answers, tests, and test answers. Test packets may be purchased from the Curriculum and Instructional Materials Center. Students should be allowed to take their workbooks home when they complete the program.

TEACHING METHODS

It is a challenge to keep students motivated. Instructors can supplement the objectives by providing the "why", personal experiences, and current information. Preparation for each unit should be determined by how each objective can best be taught. Students should become involved in preparing and planning for each unit.

Instructors should provide opportunities that will allow students to become involved in planning for and being responsible for their own education.

COMPETENCY PROFILES

A competency profile is available for each CIMC publication. Competency profiles document student performance. The profile contains a list of the specific job competencies that a student should achieve before leaving the training program. Profiles should be distributed to students as needed.

DISCLAIMERS, CORRECTIONS AND SUGGESTIONS

Materials

Please note that suggested resources and references listed in this publication existed when this publication was written. CIMC assumes no responsibility for providing these materials and cannot ensure the availability of these materials as individual vendors, manufacturers, and publishers may discontinue these products at any time.

Safety

The Curriculum and Instructional Materials Center (CIMC) wants to provide vocational instructors and students with materials that are accurate and effective. Although the CIMC strives to maintain the highest standards of development and production, oversights occasionally do occur. The CIMC assumes no responsibility for any adverse effects resulting directly or indirectly from the information, suggested procedures, undetected errors in or the reader's misunderstanding of the information presented.

Corrections and Suggestions

If you find any errors in this or other CIMC publications or have suggestions for improving their usefulness in vocational programs, please notify the CIMC staff. One easy way of pointing out errors is to make a photocopy of the affected page and to indicate the correction on the copy. Mail this information to the CIMC, where it will be used to correct the publication before the materials are reprinted.

To ensure that the material is updated on a timely basis, notify the CIMC of necessary corrections as soon as possible after discovering the error. Do not assume that someone else will notice the error and inform the CIMC; other users may be making the same assumption. Please send corrections and recommendations for improving this publication to the following address:

Curriculum and Instructional Materials Center
Attn: Curriculum Development Coordinator
Oklahoma Department of Vocational and Technical Education
1500 West Seventh Avenue
Stillwater, Oklahoma 74074-4364

BASIC SKILLS IN CURRICULUM

Since its inception in 1969, the Curriculum and Instructional Materials Center (CIMC) of the Oklahoma Department of Vocational and Technical Education has provided quality, competency-based instructional materials for vocational training programs. During this time, the CIMC has been mindful of the importance of reinforcement (and sometimes remediation) of students' academic skills as they progress through vocational training, and has always included activities in its materials to enhance and promote use of these skills.

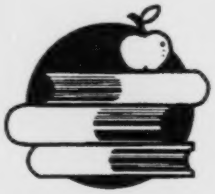
In response to changing job requirements, federal and state legislatures are enacting laws setting stringent basic skills requirements for nonvocational **and** vocational education. State legislatures are increasing basic skills accountability for teachers and school administrators. The recently enacted Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 (P.L. 101-392) mandates academic skills development in vocational training. In addition, business and industry are delivering the message clearly to educators that vocational competence now requires increased strength in the basic skills.

As noted earlier, it is not new for CIMC materials to contain information and activities that develop basic skills competencies in students taking vocational training. What **is** new is the documentation or flagging of basic skills in CIMC materials, and further enhancement of basic skills activities. To accomplish this, the CIMC has developed a "Five Point Approach to the Integration of Basic Skills into the Curriculum." Following is a brief description of this process.

I. Basic Skills Icons

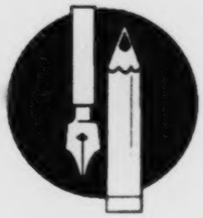
To assist teachers and students in identifying activities that promote basic skills development, the CIMC has implemented a marking system that uses simple graphic symbols, or icons, to denote which of nine general basic skill categories is being emphasized. These icons are located in the left margins of assignment, activity, and job sheets. The nine basic skill areas are as follows:

Reading Skills



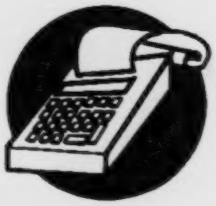
The activities identified by this icon deal specifically with developing reading skills in an applied, job-related context. These range from general information-gathering activities to tasks requiring use of specific technical reference materials.

Writing Skills

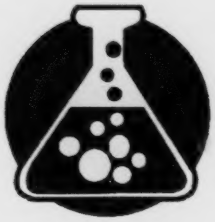


Tasks identified with this icon promote development of skills in written communication ranging in complexity from filling out forms to the written expression of ideas and concepts related to vocational exploration or performance.

Mathematics Skills



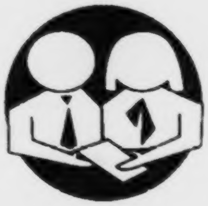
This icon identifies activities that develop vocationally related skills in computation; measurement and estimation; selection and application of appropriate mathematical process; and collecting, displaying, or interpreting data.



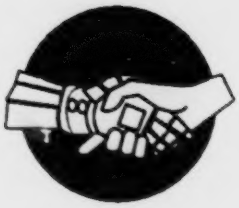
Science Skills

The science icon marks activities that are related to the development of skills in either the physical or biological sciences. These skills stress occupationally related applications of science and technology.

Oral Communication Skills



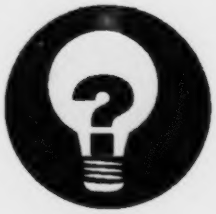
This icon identifies activities that promote development of effective speaking and listening skills. They include practice in such areas as speaking techniques, word choice, nonverbal messages, use of communication media, and using active listening techniques.



Interpersonal or Relating Skills

Activities that deal directly with skills in relating to others are marked with this icon. This includes areas such as group processes and dynamics, negotiation, dealing with conflict, and leadership/motivation.

Creative Thinking and Problem Solving Skills



This icon identifies activities that stress development of higher-order thought processes such as problem identification and analysis, lateral thinking, evaluating alternatives/outcomes, and developing solutions.

Employability Skills

Activities marked with this icon relate to competencies required to obtain employment and develop a career. These competencies include specific occupational tasks and more general items such as career planning, job search, business etiquette, and maturing in one's work environment.

Social Studies Skills

This icon is used to identify activities that stress competencies in fields relating to human society and its distribution and relationships. This includes all the social sciences such as history, economics, geography, demographics, current events, cross-cultural studies, consumer issues, environmental issues, and ethical concerns in science and technology.

Some activities in the CIMC materials develop skills in more than one of the nine basic skill areas. In cases where the relative strengths of the skill elements are clearly discernable, the icon used is the one judged to be the primary, or the most heavily emphasized, activity. When there is no clear-cut difference between importance of skill area, multiple icons are used.

II. Enablers

Once the **general** basic skill activity has been identified by an icon, the CIMC takes the process one step further by indicating the **specific** skills that are addressed in an activity. This is accomplished by using enabling skills, or "enablers."

Lists of enablers, or specific skills required for each activity, have been developed at CIMC for each of the nine basic skills areas. The enablers have been grouped into sets of related skills under each icon. The list of general skill categories under each icon is as follows:

Reading Comprehension Skills
Research and Reference Skills
Functional Reading Skills

Language Skills
Composition Skills
Research Skills
Functional Writing Skills

Operation and Calculation Skills
Math Application Skills
Data Analysis and Display Skills
Functional Math Skills

General Science Skills
Life Science Skills
Physical Science Skills
Earth Science Skills

Oral Presentation Skills
Listening Skills
Interactive Communication Skills

General Relating Skills
Teamwork/Cooperative Skills
Leadership/Influencing Skills

Enablers
Cognitive Activities Skills

Job Search/Selection Skills
Job Acquisition/Development Skills

Information Analysis Skills
Social Studies Application Skills
Functional Social Studies Skills

Applicable enablers, grouped under their general categories, are listed beneath each icon in the left-hand margin of the activity, assignment, and job sheets. For example, an exercise that requires a student to conduct library research would make necessary the use of specific reading comprehension and research and references skills. The basic skills that the exercise is promoting would be depicted in the margin as follows:

Reading Comprehension Skills
- Gain information

Research and Reference Skills
- Select useful resources
- Find materials in library

[Text]

USING THE CIMC WRITTEN TESTS AS PRETEST AND POSTTEST TO MEASURE STUDENT PERFORMANCE GAINS

When you examine this book, you will notice that separate written pretests are no longer included in the units of instruction. Each CIMC unit now contains only a single written test. This test can be used as **both** pretest and posttest by giving it once before students start a unit and again when they have completed the unit.

DOCUMENTING STUDENT PERFORMANCE GAINS

The reason for using a single instrument as both pretest and posttest is so that direct comparison of each student's competencies before and after instruction can be made accurately. This comparison enables precise calculation, documentation, and evaluation of student **performance gains**.

Accurate performance gains analysis is an important requirement of the new Carl Perkins legislation for vocational education. Teachers can make an important contribution to the performance accountability mandated by the new federal legislation by carrying out accurate performance gains analysis for their students, and making this data available to students, parents, and administrators.

This analysis is easy to do and requires only simple calculations and record keeping. The new CIMC unit tests and the instructions given here for pretest/posttest analysis are designed to help teachers keep accurate performance gains data with minimal effort.

WHY SHOULD BOTH A PRETEST AND A POSTTEST BE USED, AND WHY SHOULD THEY BE THE SAME?

It is only possible to calculate a **gain** in performance if competencies are tested **both** before and after training. The use of a pretest and posttest gives the required "before and after" information, allowing accurate comparison of student performance before and after completing a program of instruction.

Without pretest data, it is impossible to determine how well students could have met the objectives of a program without the benefit of any instruction. It would therefore be possible to incorrectly interpret good student performance on a posttest as gains in ability and knowledge produced by a good instructional program when, in fact, the posttest strength might be due merely to prior knowledge on the part of students. This erroneous conclusion is avoided by use of both pretest and posttest data.

If students cannot meet the objectives of a program prior to instruction but can meet them afterward, it is more likely that performance gain has been made as a result of instruction.

In order to provide data which can be precisely compared, the pretest and posttest **must be identical**. This is why CIMC materials have only one test for each unit. This test is intended to be used as both pretest and posttest.

By giving the written test to all students both before and after you present a unit, you will be ready to make the calculations needed for your analysis of students' performance gains on the unit. There are two techniques you should use for this analysis.

ANALYZING PERFORMANCE GAINS FOR GROUPS OF STUDENTS

The first step to measuring student performance gains on a unit is to examine the gains made by an **entire class or other group**.

The simplest technique for showing posttest gains for a group is to calculate **pass rates** on the unit test. Pass rates are very easy to calculate, and require a minimum of computation.

Pass rates are simple percentages; specifically, the percentage of students who answered each test question correctly.

Matching Test Questions to Objectives

To determine pass rates, the first step is to match each question on the test to a specific objective. This is easy with CIMC instructional materials, because they have clearly specified objectives.

For an example of matching test questions to objectives, look at the chart below. Here, a teacher has decided that test questions 1 and 4 test objective number 1; question 3 tests objective number 2; and test question number 2 tests objective number 3.

OBJECTIVE NUMBER	TEST QUESTION NUMBER
1	1
1	4
2	3
3	2

Calculating Pass Rates

After you have carefully cross-matched test questions and objectives, you are ready to proceed with the calculation of pass rates. You will determine a pass rate for **each test question**. Calculate pass rates with this simple formula:

$$\frac{\text{Number of students who passed the question}}{\text{Number of students in group}} \times 100 = \textbf{Pass Rate} \text{ (\% of the group that passed the question)}$$

Keep in mind that pass rates examine the performance of a **group**. They do **not** provide information about individual students.

Using a Pass Rate Chart

The best way to record, display, and analyze pass rates is in a **Pass Rate Chart**. The chart puts all data in uniform and easily read format and simplifies data analysis. The chart should include pass rates for the group on both the pretest and posttest for all test questions, and should indicate which specific questions relate to each objective. It should also show pass rates for the test as a whole.

Completing a Pass Rate Chart

Below is an example of a Pass Rate Chart.

PASS RATE CHART

OBJECTIVE NUMBER	TEST QUESTION NUMBER	PRETEST PASS RATE	POSTTEST PASS RATE
1	1	0%	100%
1	4	2%	82%
2	3	0%	60%
3	2	4%	92%
TOTAL TEST RATES		100-90% 0%	100-90% 60%
		89-80% 0%	89-80% 20%
		79-70% 0%	79-70% 10%
		69-60% 0%	69-60% 5%
		59-50% 0%	59-50% 5%
		49- 0% 99%	49- 0% 0%

By looking at the figures on the chart, you can easily see how great the difference in performance is for the class before and after instruction. You can also see which specific objectives and/or test questions caused problems for students. The differences between pretest and posttest pass rates represent performance gains for the group of students.

To complete a Pass Rate Chart, you need to go through a simple sequence of steps and record the information on the chart. A blank Pass Rate Chart is presented on page 11. You may duplicate this chart for your personal use.

To complete a Pass Rate Chart for a CIMC unit of instruction, go through the following steps:

1. Match the test questions on the written test to specific objectives, and fill in the first two columns on the left. These columns are labeled "Objective Number" and "Test Question Number." Some objectives may have more than one test question matched to them.

2. Give the CIMC written test as a pretest, then calculate the pass rate for each test question, using the formula given on page 4. Record the pass rate for each test question in the "Pretest Pass Rate" column.

EXAMPLE:

In a class of 26 students, 3 students got a question correct. Pass rate for the question = (3 ÷ 26) X 100, or 11.5%.

3. Calculate the total test pass rates for the pretest, and fill in these rates at the bottom of the "Pretest Pass Rate" column. Do this as follows:

   a. Calculate the percentage score made by each student on the pretest, using this formula:

$$\frac{\text{Number of points scored by student}}{\text{Number of points on the test}} \times 100 = \text{Percentage Score}$$

EXAMPLE:

A student earns 6 points out of a total of 75 possible on the test. The student's percentage score is (6 ÷ 75) X 100, or 8%.

b. Determine how many students earned percentage scores in each of the following score ranges:

100-90%
89-80%
79-70%
69-60%
59-50%
40- 0%

c. Change the **number** of students in each score range into a **percentage** of the total group, using the following formula:

$$\frac{\text{Number of students who scored in an interval}}{\text{Total number of students in group}} \times 100$$

EXAMPLE:

In a group of 32 students, 12 students scored in the interval of 59-50%. The percentage of students who scored in this interval is (12 ÷ 32) X 100, or 37.5%.

4. Give the CIMC written test again as a posttest, then repeat steps 2 and 3 above. Fill in the appropriate figures in the "Posttest Pass Rate" column for each test question, and for the total test rates.

ANALYZING PERFORMANCE GAINS FOR INDIVIDUAL STUDENTS

After completing the Pass Rate Chart to analyze the performance gains for an **entire group** of students on a test, it is a good idea to calculate a measure of performance gains for **each individual** student. A simple and accurate way to do this is to calculate a **modified percentage gain score** for each student.

The modified percentage gain score for each student should be recorded in a **Modified Gain Record Chart**. This chart makes an easy reference for evaluating the gain performance of each student. A blank Modified Gain Record Chart appears on page 12. You may duplicate this chart for your personal use.

Calculating Modified Percentage Gain Scores

Modified percentage gain scores can be calculated at the top of each student's test paper. Calculate gain scores as follows:

1. Calculate the student's **Pretest Percentage**, or the percentage score the student made on the pretest. Use this formula:

$$\frac{\text{Number of points scored by student}}{\text{Number of points on the test}} \quad \text{X } 100$$

2. Subtract this percentage from 100%. The resulting figure is the **Percentage Available** to the student for improvement on the posttest.

3. Calculate the **Posttest Percentage**, or percentage score the student made on the posttest, using the formula given in step 1.

4. Subtract the **Pretest Percentage** from the **Posttest Percentage**. This figure is the **Percentage Gained** on the posttest.

5. Divide the **Percentage Gained** (step 4) by the **Percentage Available** for gain (step 2). This figure is the ***MODIFIED PERCENTAGE GAIN***. It shows what portion of the potential increase the student **actually gained**.

EXAMPLE:

As an example of the calculation of modified percentage gain scores, suppose a student made 10% on the pretest and 90% on the posttest. The calculation would be as follows:

1. The **Pretest Percentage** score of 10% was determined using the percentage formula given in step 1 on page 8.

2. **Percentage Available** to the student for improvement on the posttest:

100%
- 10% **(Pretest Percentage)**

90% **(Percentage Available)**

3. The **Posttest Percentage** of 90% was determined using the percentage formula.

4. **Percentage Gained** on the posttest:

90% **(Posttest Percentage)**
- 10% **(Pretest Percentage)**

80% **(Percentage Gained** on posttest)

5. The **MODIFIED PERCENTAGE GAIN** score:

80% **(Percentage Gained)** ÷ 90% **(Percentage Available)** X 100 = 89%

This student made a modified gain score of 89%. That means that the student earned 89% of the improvement that was possible for him/her on the posttest, based on his/her pretest score.

Using a Modified Gain Record Chart

A modified percentage gain score should be calculated for each student on each unit test. Enter the gain scores on a Modified Gains Record Chart like the one on page 12. (Copy this form for your own use.) By using this form, you can easily check the gain scores and analyze the performance gains made by your students on each unit of instruction.

If most students have made good performance gains from your instructional program, there will be a large number of high modified gain scores. This would indicate that your students are gaining from your program **most** of what they did not know before they received instruction.

****

You know how to verify gains in performance on CIMC unit tests, both for groups of students and for individual students. The procedures you have learned are based on:

- giving **pretests and posttests** which are identical
- calculating and analyzing **group pass rates** for learning objectives, for individual test questions, and for entire unit tests (Complete a Pass Rate Chart for each unit)
- calculating and analyzing **students' modified percentage gain scores** to determine their individual performance improvement (Complete a Modified Gain Record Chart for each unit)

By using these basic procedures you will gain accurate and objective information about what specific skills your students are mastering and how much they are improving as they proceed through your program. This information will be valuable in documenting your students' achievement gains, and in increasing accountability to students, parents, administrators, and government.

PASS RATE CHART

CLASS ______________________________

TEST/UNIT TITLE ______________________________

TEST DATE ______________________________

OBJECTIVE NUMBER	TEST QUESTION NUMBER	PRETEST PASS RATE	POSTTEST PASS RATE
TOTAL TEST PASS RATES		100-90% ___% 89-80% ___% 79-70% ___% 69-60% ___% 59-50% ___% 49-0% ___%	100-90% ___% 89-80% ___% 79-70% ___% 69-60% ___% 59-50% ___% 49-0% ___%

May be reproduced for teacher/evaluator use

MODIFIED GAIN RECORD CHART

CLASS ____________________

TEST/UNIT TITLE ____________________

TEST DATE ____________________

STUDENT'S NAME	PRETEST PERCENTAGE	POSTTEST PERCENTAGE	MODIFIED PERCENTAGE GAIN

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OBJECTIVE SHEET

USE MEDICAL TERMINOLOGY

I

INTRODUCTION

If you lived and worked in a foreign country, you would need to know how to understand, speak, and read the language used. In much the same way, we need to understand medical terminology as we study practical nursing. Medical terminology provides us with the most precise and direct way to communicate patients' needs and conditions to other members in the health care field. A working knowledge of medical terminology can save us much time and confusion.

UNIT OBJECTIVE

After completing this unit, the student should be able to interpret and correctly use medical terminology and abbreviations. The student will show these competencies by completing assignment sheets and the written test with a minimum of 85 percent accuracy.

PREREQUISITE

None

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match medical roots referring to the body or its function to the English term.
2. Match medical prefixes to their correct definitions.
3. Match medical suffixes to their correct definitions.
4. Divide medical terms to determine the correct definitions.
5. Match health care specialties with their correct definitions.
6. Translate medical abbreviations into terms and terms into abbreviations.
7. Analyze medical terms. (Assignment Sheet 1)

USE MEDICAL TERMINOLOGY

PREPARATION

- Review unit and plan presentation.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- Invite guest speakers to discuss learning about, knowing, and using medical terminology.

  NOTE: Please provide speakers with the specific topic relevant to the unit of instruction ahead of time. You may want to supply the Objective Sheet, Information Sheet and any other components you want them to cover. Confirm the scheduled appearance 2-3 days prior to the presentation.
- Make a poster of commonly used abbreviations.
- Devise games and/or crossword puzzles to reinforce terms or groupings.
- Design a bulletin board filled with combining forms. Brightly colored letters may be purchased at school supply stores. Red, green and blue letters on a yellow background gets the students' attention. For example, use green letters to form the terms *algia, cephal, oma, gastr, ad, post*; red letters for *cardi, lapar, mast, ab, erythr, itis, otomy*; and blue letters for *hyster, nephr, ot, retro, poly, ectomy and bi*. Then as the class progresses through each objective, students may be asked to pick out and define forms from the group being discussed. Refer to the bulletin board at the beginning of the unit and frequently throughout to demonstrate how those foreign terms are becoming familiar.

- The game of concentration works well in this unit. A peg board and holders are needed. Then on 3 x 5 cards, or better yet, poster board cut to this size (the cards can be a little thin), write forms for various body parts on two cards. Shuffle the cards and number the opposite sides. Students choose two numbers on the concentration board and if they have a match they must define the term. This can be played as a team event or on an individual basis. The body parts work well, but other forms could also be used.

- Bingo adapts well to medical terminology. Supply the students with blank bingo grids with free space marked. Develop a format for the students to follow in filling in the card. For instance, use 13 prefixes dealing with position, 2 prefixes dealing with color, 8 prefixes dealing with numbers and measurement, and 1 prefix of negation. Call out the English terms while the students cover the medical term. When there is a "bingo" the student must call back the correct medical and English term. Use Handout 1.

- Students may work together in groups and become familiar with the medical dictionary as well as medical terminology. Have one group find ten (or any number desired) words beginning with a prefix in the A-H pages, another group ten words in the I-N pages, etc. Divide the entire group and the dictionary in any way that is convenient. All groups can then share their words and meanings (showing how the meanings are derived) with the whole group.

- Have the class work together in a "hospital report" activity deciding what is wrong and what will be happening with each patient. Use Handout 3.

- Prepare flash cards with a medical term on one side and an English word on the other. Students can work together in pairs or groups to learn the meanings.

- **HOSA** integration:

  — A "HOSA Bowl" or brain bowl activity can be used. Have two teams of four students each. Pronounce or show a term and allow a pre-determined amount of time for response. If bells or buzzers are available, have the students respond first with the bell or buzzer to determine which team wins the right to respond.

- Encourage the students to pronounce the various combining forms and words formed from them to become used to the pronunciation.
- Most of the same activities can be adapted to abbreviations.
- Assist students to conduct a chapter service project on medical terms.
- Create a poster according to Extemporaneous Health Display rules. Display in highly visible areas.

DELIVERY

Discuss the objectives.

Objective 1

- Discuss roots pertaining to the body or its functions.
- Play concentration with terms.
- Use Activity Sheet 1 to give students practice with roots pertaining to the body or its functions.

Objective 2

- Discuss medical prefixes.
- Have students divide into groups and search the dictionary for examples of words beginning with prefixes.
- Use Activity Sheet 2 to give students practice with medical prefixes.

Objective 3

- Discuss medical suffixes.
- Write terms with suffixes on the board and let students test their current knowledge about suffixes.
- Use Handout 1 to let students play Bingo with medical suffixes.

Objective 4

- Discuss the process of dividing medical terms to determine their meanings.
- Separate students into groups and have them divide groups of words provided. Have each group share their analyses by writing each word on the board, dividing it and explaining the derived meaning. Use Handout 2.

Objective 5

- Discuss health care specialties.
- Use Activity Sheet 4 to give students practice identifying health care specialties.
- Have students work crossword puzzle with names of health care specialties. (Activity Sheet 5)

Objective 6

- Discuss abbreviations.
- Use Activity Sheet 6 to give students practice with abbreviations.
- Have students work in groups to make flash cards for use in studying abbreviations. Trade flash cards among groups for study.

APPLICATION

Objective 7

- Use Assignment Sheet 1 to give students practice in analyzing medical terms.
- Use Handout 2 to give students practice with analyzing medical terms. This activity can be done as a class, in groups, or individually.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.

- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities if not previously completed.
- Reteach and retest if necessary.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- Damon Instructional Systems, *Medical Terminology 350* 1983, Westwood Massachusetts. (Complete instructional system with workbook and audiovisual materials. Available in video, slide, LaBelle, and filmstrip formats.) 80 Wilson Way, Westwood, Mass.

Computer Software

- Leonard, Peggy C. *Building a Medical Vocabulary.* W. B. Saunders Company, 6277 Sea Harbor Dr., Orlando, FL 32821. Phone 800-782-4479

Publications

- Austrin, Miriam G. and Harvey R. Austin. *Young's Learning Medical Terminology*, The C.V. Mosby Company, St. Louis, Missouri, 1987.

- Davis, Neil M. *Medical Abbreviations: 2300 Conveniences at the Expense of Communications and Safety*, (2nd ed.), Neil M. Davis Associates, Huntington Valley, Pennsylvania, 1983.
- Enrlich, Ann. *Medical Terminology for Health Professions*, Albany, Delmar Publishers Inc., New York, 1988.
- LaFleur, Myrna Weber and Winifred K. Starr. *Exploring Medical Language*, The C.V. Mosby Company, St. Louis, Missouri, 1985.
- Rice, Jane. *Medical Terminology with Human Anatomy*, Appleton-Century-Crofts, Norwalk, Connecticut, 1986.
- *Taber's Cyclopedic Medical Dictionary*, F.A. Davis Company, (15th ed.), Philadelphia, Pennsylvania, 1985.
- Wilson, Marilyn White. *Basic Medical Terminology Concepts*, The Brady Company, Englewood Cliffs, New Jersey, 1989.

UNIT REFERENCES

- Noakes, Shirley R., "Abbreviation Blues". *Licensed Practical Nurse*, Spring, 1985, p. 21. The National Federation of Licensed Practical Nurses, Inc., P.O. Box 18088, 3948 Browning Place, Suite 205, Raleigh, North Carolina, 27619.
- Schniedman, Rose and Susan Lambert. *Being a Nursing Assistant*, (4th ed.), The Brady Company, Englewood Cliffs, New Jersey, 1986.
- Smith, Bryan C. and Bentley E. Smith. *Medical Terminology for the Health Professions*, Harcourt, Brace Jovanovich, Inc., Orlando, Florida, 1986.

BINGO GRID

		FREE		

ANALYZE MEDICAL TERMS

As a learning activity, the students are divided into six small groups. Each group receives a list of words to define by analyzing the combining forms within the words. Each group then reports back to the entire class, pointing out the components of each word. Medical dictionaries should be used only after the group decides on a meaning. They may then confirm the meaning with a dictionary.

Periosteum
Adipectomy
Hemarthrosis
Erythrocytosis
Angiomegaly
Ileocystoplasty

Tachypnea
Microcephaly
Angiomalacia
Anemia
Nephroureterocystectomy
Phlebotomy

Ureterolithotomy
Hematomyelitis
Myocarditis
Cystocele
Encephalogram
Hypoglycemia
Intercostobrachial
Spondylosyndesis
Glossoplegia
Analgesic
Hematorrhea
Adipoma

Otorhinolaryngology
Hysterosalpingography
Ileitis
Rhinodynia
Cardiohepatomegaly

Hematocytopenia
Hemophthalmia
Encephalopathy
Abdominohysterectomy
Ambiopia
Angiorrhea
Thoracopneumoplasty

HANDOUT 3

USE MEDICAL TERMINOLOGY

I

HOSPITAL REPORT

When the shift changes in a hospital, the departing nurses give a report to the nurses arriving for the new shift. This report helps the new shift know what has been happening to the patients and what is to take place. It could sound something like the report below. Analyze the underlined words to determine what is wrong with each patient and what has been and will be happening.

Room 200—This woman has been having diagnostic tests for epigastric pain. Today she is having an exploratory laparotomy.

Room 201—This woman is 4 days post-op after a cholecystectomy with an incidental appendectomy.

Room 202—This man has a diagnosis of colitis. Today he is having a colonoscopy.

Room 203—This elderly woman has a diagnosis of pneumonitis. During the night, she has been having episodes of apnea with cyanosis. Today she is to have a bronchoscopy.

Room 204—This is a post-op patient who has had a hysterosalpingo-oophorectomy. She has been having episodes of tachycardia and has an electrocardiogram ordered to be done this morning.

Room 205—This is a woman who will have surgery sometime this week for a cystocele and hysteroptosis. She has a history of arteriosclerosis.

Room 206—This man has bilateral ureterostomies. He is admitted now with nephritis.

Room 207—This patient's chief complaint is hematuria. His diagnosis is cystitis.

Room 208—The patient in this room is diagnosed as having encephalopathy. His symptoms include severe cephalalgia, dysphagia and right hemiplegia. He is to have an angiogram.

Room 209—This patient is in for diagnosis. She has had arthritis for some time. Now she has hyperglycemia and hepatomegaly.

Room 210—This patient has had excision of a melanoma on a previous admission. During the admission for chemotherapy, she has developed a leukopenia.

Room 211—This 80 year old man has been admitted from a nursing home with anuria. Today he will have a cystoscopy. On admission it was noted that he had a dermatosis with erythematous lesions.

Room 212—This patient has had a pneumonectomy and tracheostomy for treatment of carcinoma.

OBJECTIVE 1

Match medical roots referring to the body or its functions to the English term.

At first, medical terminology may seem like a foreign language — and for good reason! Most medical terminology is derived from Greek and/or Latin. For some English words we actually have two medical terms — one Greek and one Latin.

But medical terminology is quite conquerable because the terms are a combination of three basic parts.

Roots tell us what the word is referring to and is often a body part.

EXAMPLE: crani = skull, bio = life

Suffixes tell us what is being done to the root or something about the condition of the root.

EXAMPLE: logy = study of
biology = the study of life

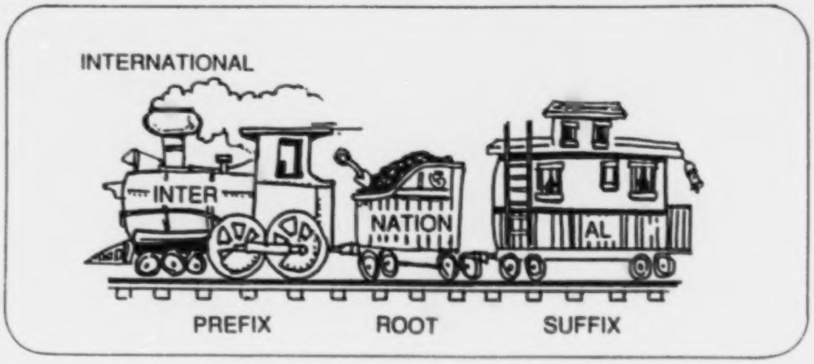
Prefixes further define or limit the root.

EXAMPLE: intra = within, in
intracranial = within the skull

One other part maybe present in some words. A combining vowel may be inserted to help us pronounce some words. The vowel is usually "o", but "i" or "u" may be used. The combining vowel links two basic parts.

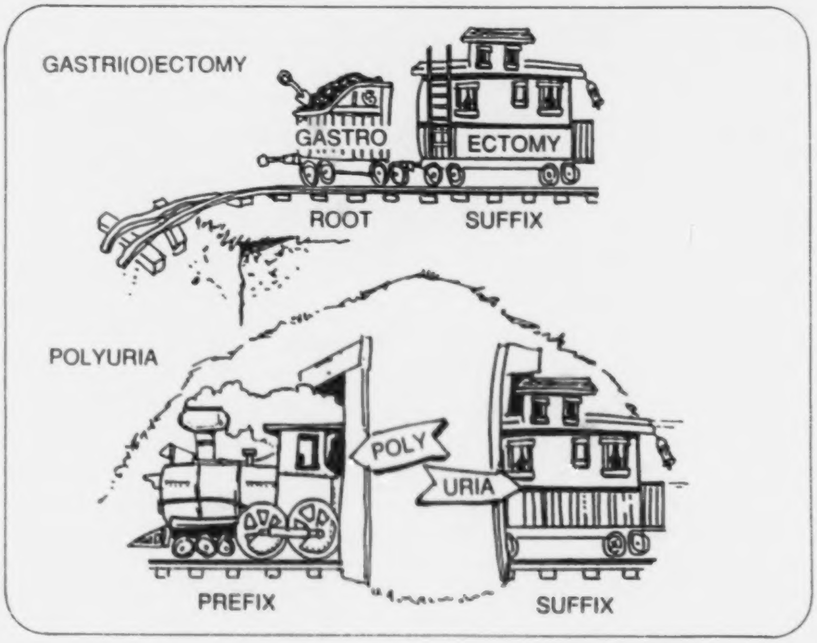
EXAMPLE: hysteroscopy (hyster = uterus + scopy = viewing with an instrument), pronounced **his-ter-AH-skuh-py** is easier to say than **his-ter-SCOPE-ee**

Roots, prefixes, and suffixes may be linked together in various ways to describe various conditions. Actually this happens all the time in English. Look at the following examples of English and medical terms to see how various parts are linked together.


INTERNATIONAL
INTER
NATION
AL
PREFIX
ROOT
SUFFIX

EXAMPLES OF COMBINING WORD ELEMENTS

Prefix	*Root*	*Suffix*	*Word*
dis	agree	able	disagreeable
	war	like	warlike
un	pardon	able	unpardonable
inter	nation	al	international
speed(o)	meter		speedometer
	beauty	full	beautiful


GASTRI(O)ECTOMY
GASTRO
ECTOMY
ROOT
SUFFIX
POLYURIA
POLY
URIA
PREFIX
SUFFIX

Source: *Being a Nursing Assistant*, 4th Edition, 1986. Used with permission of The Hospital Research and Educational Trust.

EXAMPLES OF ROOTS AND SUFFIXES

Word	*Pronunciation*	*Root*	*Suffix*
colostomy	co/LOS/to/my	col(o)	ostomy
gastrectomy	gas/TREC/to/my	gastr(o)	extomy
myasthenia	my/as/THE/ni/a	my(o)	asthenia
osteoma	os/te/O/ma	oste(o)	oma

EXAMPLES OF PREFIXES AND ROOTS

Word	*Pronunciation*	*Prefix*	*Roots*
ectoderm	EC/to/derm	ecto	derm
retropubic	RE/tro/pu/bic	retro	pubic
endoskeleton	EN/do/skel/e/ton	endo	skeleton
hemiplegic	hem/i/PLE/gic	hemi	plegic
hypertension	hy/per/TEN/sion	hyper	tension

EXAMPLES OF TERMS WITH TWO ROOTS

Word	*Pronunciation*	*First Root*	*Second Root*
bronchopneumonia	bron/cho/pneu/MO/ni/a	broncho	pneumo
gastroenteritis	gas/tro/en/ter/I/tis	gastro	enter(o)
osteoarthritis	os/te/o/ar/THR/tis	osteo	arthr(o)
pyelonephritis	py/e/lo/neph/RI/tis	pyelo	nephr(o)

EXAMPLES OF TERMS FORMED BY COMBINING PREFIXES AND SUFFIXES

Word	*Pronunciation*	*Prefix*	*Suffix*
diarrhea	di/ar/REH/a	dia	rrhea
endoscopy	en/DOS/co/py	end(o)	oscopy
excise	ex/CISE	ex	cise
epilepsy	EP/i/lep/sy	epi	lepsy
polyuria	pol/y/U/ri/a	poly	uria

Source: *Being a Nursing Assistant*, 4th Edition, 1986. Used with permission of The Hospital Research and Educational Trust.

Since everyone recognizes some terms referring to parts of the human body, that's a logical place to start.

ROOT WORDS REFERRING TO *THE HEAD*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Head	cephal capit	cephalic—pertaining to the head decapitate—separation of the head from the body
Skull (the bony part)	crani	cranial—pertaining to the skull
Face	faci	facial—pertaining to the face
Ear	ot	otoscope—an instrument
	aur	aural—pertaining to the ear
Eye	ophthalm	ophthalmologist—a doctor who treats the eyes
	ocul	ocular—pertaining to the eye
Eyelid	blephar	blepharospasm—twitching of the eyelid
Nose	rhin	rhinorrhea—flow from the nose
	nas	nasal—pertaining to the nose
Cheek	bucc	buccal—pertaining to the cheek
Mouth	or stom(at)	oral—pertaining to the mouth stomatitis—inflammation of the mouth

ROOT WORDS REFERRING TO *THE HEAD*, Continued

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Gums	gingiv	gingivitis—inflammation of the gums
Lip	cheil	cheiloplasty—plastic surgery of the lip
	labi	labial—pertaining to the lips
Tooth	odont	orthodontist—a dentist who straightens teeth
	dent	dentist—one who treats teeth
Tongue	gloss	glossitis—inflammation of the tongue
	lingua	lingual—pertaining to the tongue
Neck	cervic	cervical—pertaining to the neck
	trachel	trachelomyitis—inflammation of the neck muscles

NOTE: The words for neck, lip, and mouth may be found referring to structures other than just those parts. They may also refer to neck-like, lip-like, and mouth-like structures or parts elsewhere. Thus, we have a cervical part of a tooth and the cervical area of the female uterus. The labia are lip-like structures of the female genitalia. A stoma is created when more or less permanent openings are made into structures such as the colon or small intestine.

ROOT WORDS REFERRING TO *THE MUSCULOSKELETAL SYSTEM*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Bone	ost(e)	osteomalacia — softening of bone
	oss	osseous—bone-like
Bone marrow	myel	myeloblast—a blood cell manufactured in the bone marrow
Joint	arthr	arthritis—inflammation of a joint
	articul	articulation—connection of bones
Cartilage	chondr	chondroma—tumor of cartilage
Collar bone (clavicle)	clavic	clavicular—pertaining to the collar bone
Breastbone (sternum)	stern	sternal—pertaining to the breastbone
Rib	pleura	pleura—a lining of the chest cavity (the cavity within the ribs)
	cost	intercostal—between the ribs
Hip	ili	ilium—the hip-bone
Vertebra	spondyl	spondylosis—a condition of the vertebrae
Arm	brachi	brachial—pertaining to the arm
Hand	cheir	cheiroplasty—plastic surgery of the hand
	chir	chiropractor—one who manipulates (with the hands)
	man	manual—with the hands

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Finger, Toe	dactyl	syndactylism—fusion of fingers or toes
	digit	digital—pertaining to a finger or toe

NOTE: We are accustomed to hearing "digit" related to numbers and "digital" to clocks. Early man probably used fingers for counting and calculation and thus we have the word "digit" meaning finger or toe and also referring to numbers.

ROOT WORDS REFERRING TO *THE MUSCULOSKELETAL SYSTEM*, Continued

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Foot	ped(i)	pedal—referring to the foot (A pedal is also a device operated by the foot)
Muscle	my	myoma—a tumor of muscle
	muscul	muscular—pertaining to muscle
Straight	ortho	orthopedics—the branch of medicine treating the bones, muscles, and joints (literally, straight feet)

ROOT WORDS REFERRING TO *THE HEART AND BLOOD VESSELS*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Heart	cardi	cardiovascular—dealing with the heart and blood vessels
Blood vessel	angi	angiogram—X-ray of blood vessels

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
	vas	vascular—pertaining to blood vessels
Artery	arter	arterial—pertaining to arteries
Vein	ven	venous—pertaining to veins
	phleb	phlebitis—inflammation of a vein with clot formation
Blood	hem	hemostat—device to stop the flow of blood
	hemat	hematuria—blood in the urine
Pulsing	sphyg	sphygmomanometer —device to measure blood pressure (the pulsing of blood)

ROOT WORDS REFERRING TO *THE RESPIRATORY SYSTEM*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Throat (pharynx) (fair-inks)	pharyng	pharyngitis—inflammation of the throat (a sore throat)
Voice box (larynx) (lair-inks)	laryng	laryngitis—inflammation of the voice box
Windpipe (trachea)	trache	tracheostomy—opening into the windpipe
Bronchus	bronch	bronchoscopy—an examination of the bronchus
Lung	pneum	pneumonia—a condition of the lungs
	pulmon	pulmonary— pertaining to the lungs

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Breathing	pnea	dyspnea—difficulty breathing
Air	aero	aerobe—requiring oxygen (air)
Chest	thorac	thoracic—pertaining to the chest
	pect	pectoral—concerning the chest
	steth	stethoscope—a device for listening to the chest
Diaphragm	phren	phrenoplegia—paralysis of the diaphragm

NOTE: "Phren" means both mind and diaphragm. The exact meaning must be determined by context or by a dictionary.

ROOT WORDS REFERRING TO THE *DIGESTIVE SYSTEM*

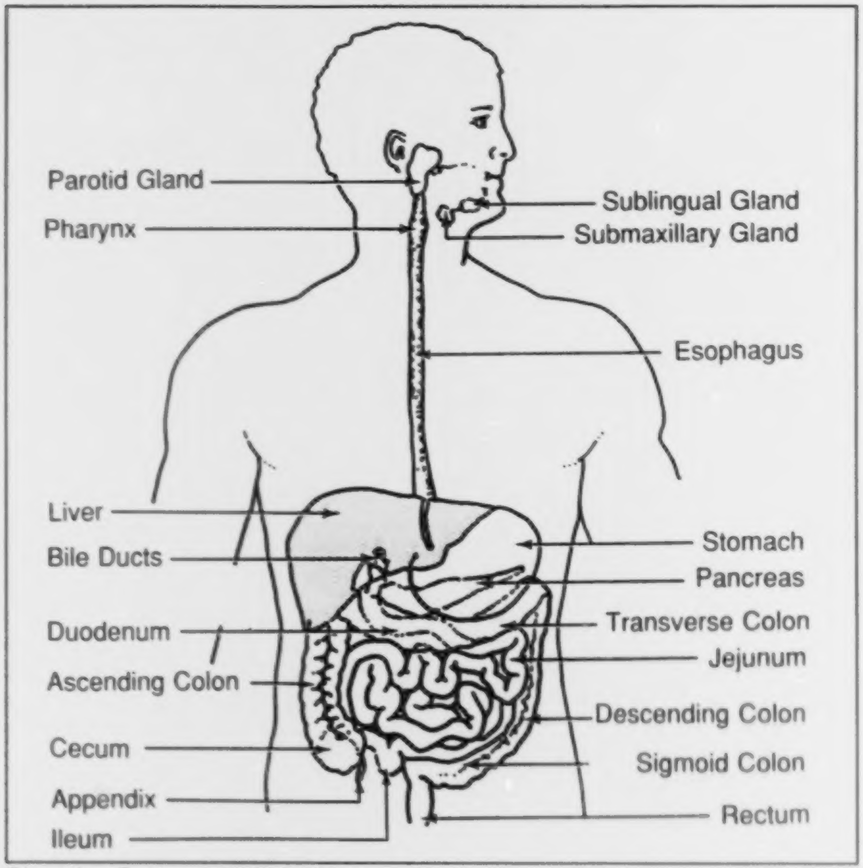
ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Abdomen	abdomin (note the e has changed to i)	abdominal—pertaining to the abdomen
	lapar	laparotomy—incision into the abdomen
Esophagus	esophag	esophageal—referring to the esophagus
Stomach	gastr	gastritis—inflammation of the stomach
Intestines	enter	enteritis—inflammation of the intestines
	intestin	intestinal—referring to the intestines
Duodenum	duodeno	duodenal—pertaining to the duodenum

Jejunum	jejuno	jejunostomy—opening into the jejunum
Ileum	ile (this is pronounced the same as ili, hip)	ileal—pertaining to the ileum
Large intestine	col (on)	colonoscopy—view of the colon with an instrument
Rectum	proct	proctorrhagia—rectal bleeding
Anus	ano	anal—referring to the anus

NOTE: While the anus is an opening and the rectum is the final portion of the large intestine, in practice the two terms may be used interchangeably.

ROOT WORDS REFERRING TO THE *DIGESTIVE SYSTEM*
Continued

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Spleen	splen	splenic—referring to the spleen
Liver	hepat	hepatitis—inflammation of the liver
Gall bladder	cholecyst	cholecystectomy—removal of the gall bladder
Bile	bili	biliary—pertaining to or carrying bile
Eating	phage	phagocyte—a cell that destroys (eats) microorganisms
Digesting	peps pept	pepsin—a digestive enzyme peptic—concerning digestion


Parotid Gland
Pharynx
Sublingual Gland
Submaxillary Gland
Esophagus
Liver
Bile Ducts
Stomach
Pancreas
Duodenum
Transverse Colon
Jejunum
Ascending Colon
Descending Colon
Cecum
Sigmoid Colon
Appendix
Rectum
Ileum

Digestive System* ©1986 HBJ

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ROOT WORDS REFERRING TO *THE URINARY SYSTEM*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Urine	ur	urinary—referring to urine
Kidney	nephr	nephrectomy—removal of a kidney
	ren	renal—referring to a kidney
Bladder	cyst	cystitis—inflammation of a bladder
	vesic	vesicotomy—incision into the bladder

NOTE: The words for bladder may be found in describing skin conditions. Cysts or vesicles are "little bladders" or fluid-filled sacs.

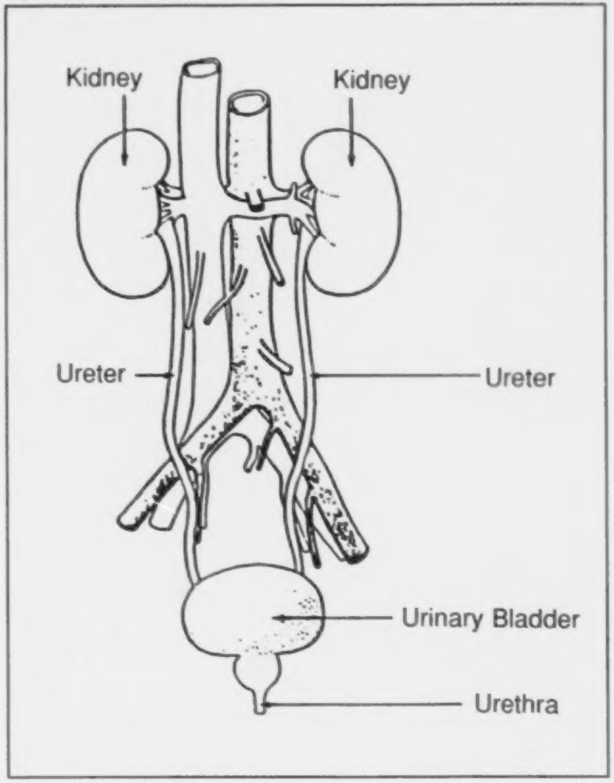
ROOT WORDS REFERRING TO *THE URINARY SYSTEM,*
Continued

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Ureter	ureter	urethral—referring to the ureter
Urethra	urethr	urethral—referring to the urethra

NOTE: The terms *ureter* and *urethra* are easily confused. There are two ureters or tubes leading from the kidneys to the bladder. There is one urethra leading from the bladder to the outside of the body. The two terms are used in many combinations when discussing disorders of the urinary systems and there is a big difference between them. Being able to distinguishing one from another is essential for responsible nursing practice.

Figure 4

Urinary system* © 1986 HBJ


Kidney
Kidney
Ureter
Ureter
Urinary Bladder
Urethra

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ROOT WORDS REFERRING TO *THE REPRODUCTIVE SYSTEM*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Uterus (womb)	uter	uterine—referring to the uterus
	hyster	hysterectomy—removal of the uterus
	metr	metrorrhagia—bleeding from the uterus

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Ovary	ovar	ovarian—referring to the ovary
	oophor	oophorectomy—removal of the ovary
Vagina	vagina	vaginal—referring to the vagina
	colp	colpitis—inflammation of the vagina
Uterine or Fallopian Tube	salping	salpingectomy—removal of the Fallopian tube
Cervix	cervic	cervical—referring to the cervix

NOTE: Actually "cervix" is derived from the word for neck, since the cervix is the "neck" of the uterus.

ROOT WORDS REFERRING TO *THE REPRODUCTIVE SYSTEM*, Continued

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Menstrual	men	menopause—the ending of menstrual periods

NOTE: The form "men" means month. Menstrual can be taken to mean monthly.

ROOT WORDS REFERRING TO *THE REPRODUCTIVE SYSTEM*, Continued

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Breast	mamm	mammary—referring to breast tissue
	mast	mastectomy—removal of a breast
Milk	lact	lactation—production of milk

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Testes	orchi	orchitis—inflammation of the testes

Figure 5

Female reproductive system* © 1986 HBJ

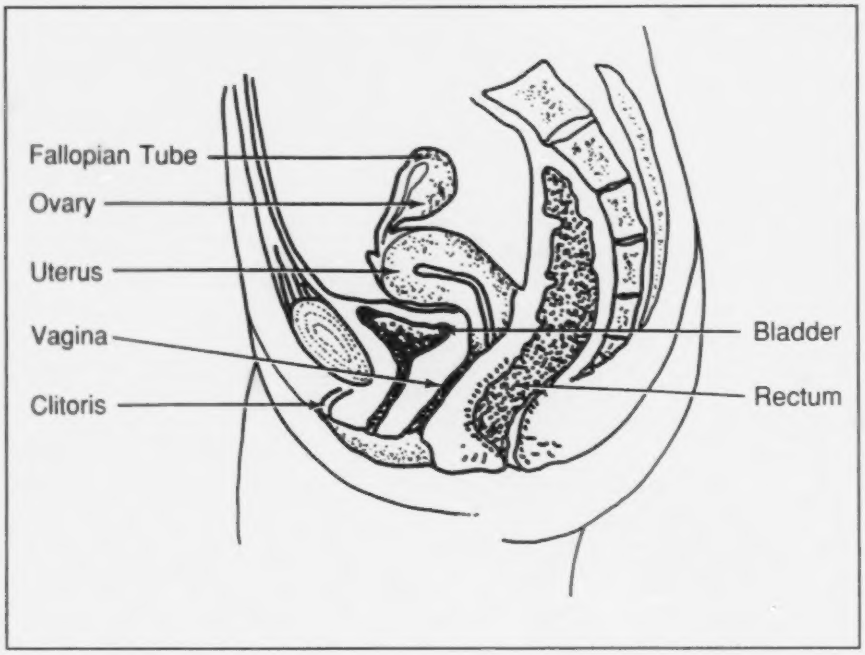
Fallopian Tube
Ovary
Uterus
Vagina
Clitoris
Bladder
Rectum

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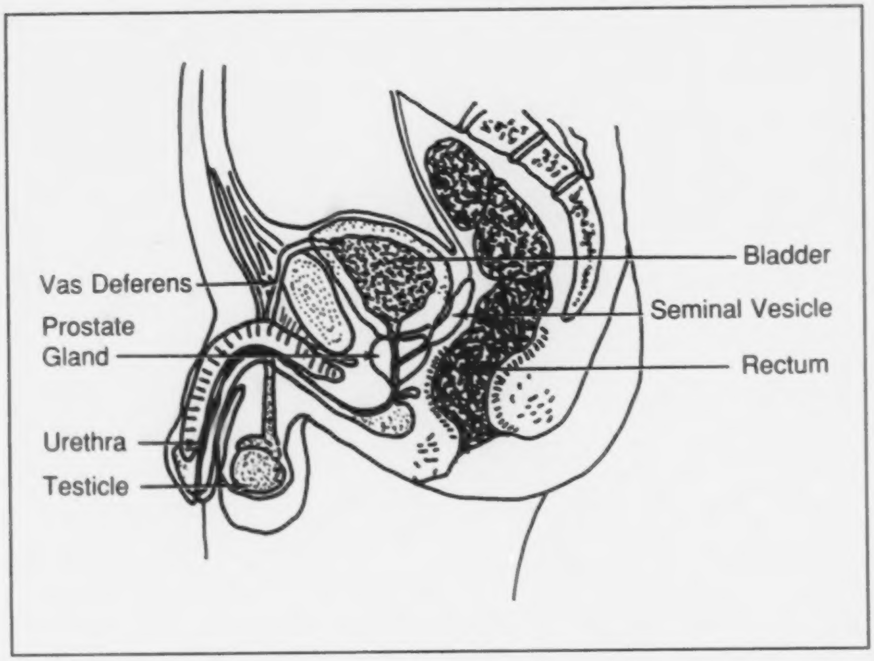
Figure 6

Male reproductive system* © 1986 HBJ


Vas Deferens
Prostate Gland
Urethra
Testicle
Bladder
Seminal Vesicle
Rectum

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ROOT WORDS REFERRING TO *THE NERVOUS SYSTEM AND SENSES*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Brain	encephal	encephalitis—inflammation of the brain
	cerebr	cerebral—referring to the brain
Spinal cord	myel	myelogram—X-ray procedure to view the spinal cord

NOTE: "Myel" means both bone marrow and spinal cord. A word with "myel" in it must be analyzed to determine which part is meant. Experience and a medical dictionary are helpful.

ROOT WORDS REFERRING TO *THE NERVOUS SYSTEM AND SENSES* Continued

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Nerve	neur	neural—pertaining to nerves
Feeling, perceiving	sens	sensation—feeling
	aesthe	anesthesia—without feeling
Seeing, vision, light	op(t)	optical—pertaining to seeing
Hearing	acousti	acoustic—pertaining to hearing
	audi	audible—capable of being heard
Voice, sound	phon	phonic—pertaining to the voice
Speaking	phas	aphasia—unable to speak
Sleep	somni	insomnia—unable to sleep

ROOTS THAT REFER *GENERALLY TO THE HUMAN BODY*

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Body	somat	somatic—pertaining to the body
	physio	physiology—the study of the function of the body
Mind	ment	mental—referring to the mind
	psych	psychology—study of the mind
	phren	phrenic—pertaining to the mind
Cell	cyt	cytology—study of cells
	cell	cellular—referring to cells
Tissue	hist	histology—study of tissue
Gland	aden	adenitis—inflammation of a gland
Skin	derm(at)	dermatosis—condition of the skin
	cut	cutaneous—referring to the skin
Hair	trich	leukotrichia—having white hair
	pilo	depilatory—a substance for removing hair
Flesh	sarc	sarcoma—a fleshy tumor
Fat	lip	liposuction—procedure for removing fat
	adip	adipose—fat tissue

ENGLISH WORD	MEDICAL ROOT	EXAMPLE
Water	hydro	hydroma—a cyst containing watery material
	hydra	hydration—containing water
Stone	calc	calculus—a stone
	lith	lithiasis—condition of having a stone
Sugar	gluc	glucose—sugar
	glyc	glycosuria—sugar in the urine
Cancer	carcin	carcinogen—causing cancer
Mass, tumor, swelling	onco	oncology—the study of tumors (cancer)
Production, origin	gen	genesis—generation, origin
Life	bio	biology—the study of life
Death	necr	necrosis—condition of being dead
Male	andr	android—male-like
Female	gyne	gynecology—study of the female
Child	pedia	pediatrics—the study of children
Old	ger	geriatrics—the study of the elderly
	geron(t)	gerontology—the study of the elderly
Set, sit, stand	sta(s)	stasis—standing still
Heat	therm	thermometer—a device for measuring heat
Cold	cryo	cryotherapy—use of cold as treatment

Figure 7

Andro/Man

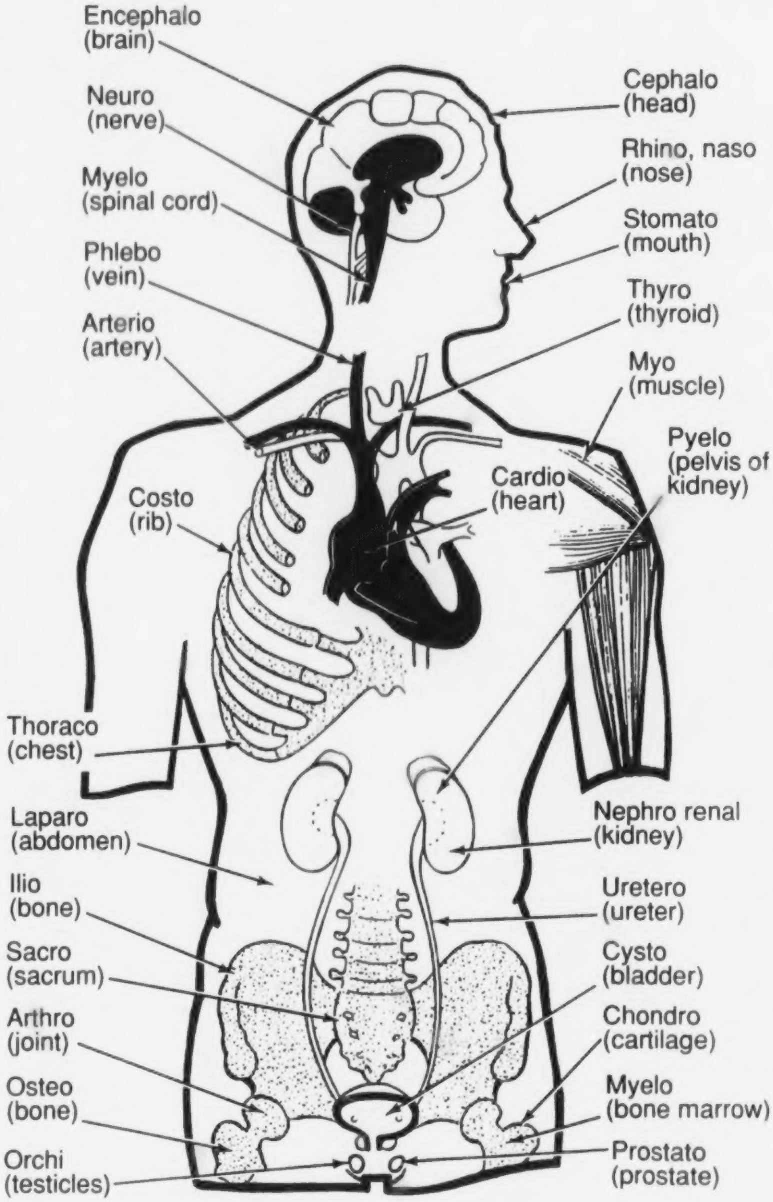
Encephalo (brain)
Neuro (nerve)
Myelo (spinal cord)
Phlebo (vein)
Arterio (artery)
Costo (rib)
Thoraco (chest)
Laparo (abdomen)
Ilio (bone)
Sacro (sacrum)
Arthro (joint)
Osteo (bone)
Orchi (testicles)
Cephalo (head)
Rhino, naso (nose)
Stomato (mouth)
Thyro (thyroid)
Myo (muscle)
Pyelo (pelvis of kidney)
Cardio (heart)
Nephro renal (kidney)
Uretero (ureter)
Cysto (bladder)
Chondro (cartilage)
Myelo (bone marrow)
Prostato (prostate)

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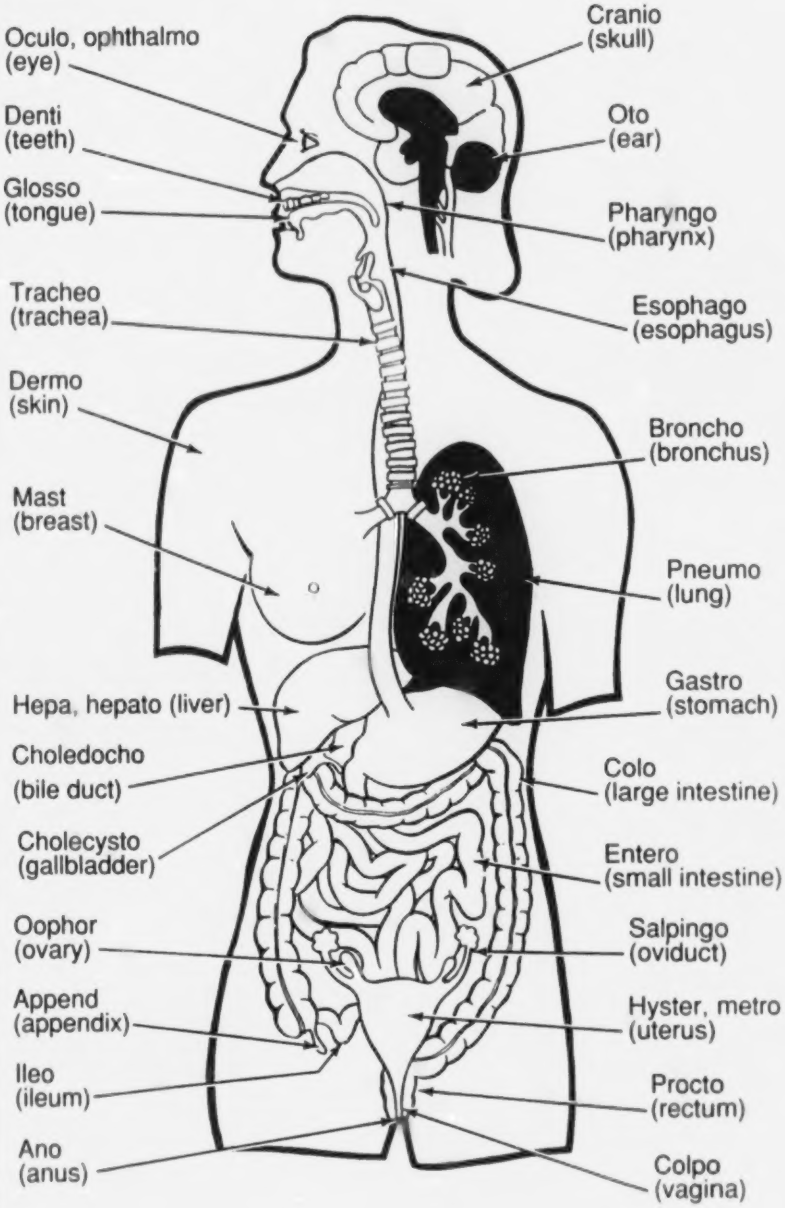
Figure 8

Gyne/Woman



Oculo, ophthalmo
(eye)
Denti
(teeth)
Glosso
(tongue)
Tracheo
(trachea)
Dermo
(skin)
Mast
(breast)
Hepa, hepato (liver)
Choledocho
(bile duct)
Cholecysto
(gallbladder)
Oophor
(ovary)
Append
(appendix)
Ileo
(ileum)
Ano
(anus)
Cranio
(skull)
Oto
(ear)
Pharyngo
(pharynx)
Esophago
(esophagus)
Broncho
(bronchus)
Pneumo
(lung)
Gastro
(stomach)
Colo
(large intestine)
Entero
(small intestine)
Salpingo
(oviduct)
Hyster, metro
(uterus)
Procto
(rectum)
Colpo
(vagina)

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OBJECTIVE 2

Match medical prefixes to their correct definitions.

Prefixes define or limit the root in some way. For ease in learning, we can divide prefixes into four broad categories. The first group deals roughly with position; the second with color; the third with numbers; and the final with negation.

The first group deals generally with position. This can be both position in space and time.

GROUP 1 — PREFIXES MEANING *BEFORE*

PREFIX	MEANING	EXAMPLE
ante	before, forward	antenatal—before birth
pro	in front of, before	prootic—in front of the ear
pre	in front of, before	preoperative—before surgery

PREFIXES MEANING *BEHIND*

PREFIX	MEANING	EXAMPLE
retro	backward, behind	retroocular—behind the eye
post	after, behind	postoperative—after surgery

PREFIXES REFERRING TO *SIDES OR AROUND AN AREA OR EVENT*

PREFIX	MEANING	EXAMPLE
ambi	both, both sides	ambidextrous—able to work with hands
amphi	both, both sides double, around	amphitheater—an area with seats around it
circum	around, about on all sides	circumoral—around the mouth

PREFIX	MEANING	EXAMPLE
peri	about, around	perioperative—around the time of surgery
para	around, beside, beyond, after	paramedic—someone who works "beside" a doctor (although in actual practice, paramedics work independently)

NOTE: The prefix "para" extends into a slightly different area. Several other terms can be inserted here.

PREFIXES MEANING *ACROSS, THROUGH, AND/OR BEYOND*

PREFIX	MEANING	EXAMPLE
meta	beyond, change	metastasis—change of location of disease (as spreading of cancer)
trans	across, through, beyond	transdermal—across the skin
dia	across, through, between, apart	diaphragm—a structure completely across the middle of the body

PREFIXES MEANING *IN OR WITHIN*

PREFIX	MEANING	EXAMPLE
in	in, within	indwelling—staying within
en	in, within, inside	encephalon—the brain, a structure inside the head
end	inside, within	endotracheal—within the trachea
em	in, within, inside	empyema—pus within a cavity
im	in, into, within	implant—put into

PREFIX	MEANING	EXAMPLE
intro	into, within	introversion—turning inward
intra	within, in	intravenous—within a vein
inter	between	intercostal—between the ribs

NOTE: *Inter and intro* can be easily confused. A school may have *intramural* sports meaning teams play other teams *within* the school. The same school may have *intermural* sports meaning teams from that school play teams from other school. These games are *between* schools. A patient receiving *intravenous* fluids hopes the needle remains *within* the vein. *Interdepartmental* communications are those *between* departments.

PREFIX	MEANING	EXAMPLE
inter	between	intercostal—between the ribs

PREFIXES MEANING *OUTSIDE*

PREFIX	MEANING	EXAMPLE
ecto	outside	ectocytic—outside the cell
ex	out, away from	exit—a place to go out
exo	outside, outward, outer	exodontia—taking a tooth out
extra	outside of, outward, beyond	extragenital—outside of or beyond, unrelated to the genitals
extro	outside of, outward	extrovert—person who is, interested in events outside of himself

PREFIXES MEANING *AWAY FROM*

PREFIX	MEANING	EXAMPLE
dis	apart, away, free from	disinfect—to free from infection
de	down, from	dehydrate—remove water from

PREFIXES MEANING *TOGETHER*

PREFIX	MEANING	EXAMPLE
co **com** **con**	with, together	congenital—present at birth (born with)
syn **sym**	together	syndesis—bound together sympodia—condition in which the lower extremities are united

PREFIXES REFERRING TO *POSITION AND DIRECTION*

PREFIX	MEANING	EXAMPLE
ad	to, toward, near	addition—to add to
ab	away from	absent—to be away from a place
later	side	lateral—pertaining to the side
mes	middle	mesial—pertaining to the middle
med	middle	medial—pertaining to the middle
dextr	right	dextromanual—right-handed
sinistr	left	sinistropedal—left-footed

PREFIXES MEANING *OPPOSITION*

PREFIX	MEANING	EXAMPLE
anti	against	antiseptic—against infection
contra	opposing	contralateral—occurring on similar parts on an opposite side

PREFIXES MEANING *ABOVE*

PREFIX	MEANING	EXAMPLE
epi	upon, above, over	epigastric—over the stomach
supra	above, over	suprarenal—over the kidney
hyper	over, above, excessive	hyperactive—excessive activity

PREFIXES MEANING *BELOW*

PREFIX	MEANING	EXAMPLE
sub	under, beneath, below	subcutaneous—under the skin
infra	below, beneath	infracostal—below a rib
hypo	under, beneath, deficient	hypodermic—under the skin

GROUP 2 — PREFIXES REFERRING TO *COLOR*

PREFIX	MEANING	EXAMPLE
alb	white	albinism—absence of pigment from skin, hair, eyes
leuk	white	leukocyte—white blood cells
erythr	red	erythrocyte—red blood cells

PREFIX	MEANING	EXAMPLE
rube	red	rubor—redness of skin
cirrh	yellow	cirrhosis—condition of being yellow
xanth	yellow	xanthoderma—yellow skin
chlor	green	chlorophyll—green pigment in plants
cyan	blue	cyanosis—condition of being blue
melan	black	melanoma—dark colored mole or tumor

GROUP 3 — PREFIXES REFERRING TO *NUMBER, SIZE, OR DEGREE*

PREFIX	MEANING	EXAMPLE
nulli	none	nullipara—having borne no children
primi	first	primary—first
mono	one	monocytic—one side
uni	one	unilateral—one side
bi	two, twice, double	bilateral—two sides
di	both	diarthric—two or more joints
tri	three	trilateral—having three sides
quadr	four	quadrant—one of four regions
dec(i) **dec(a)**	tenth ten	decimal—one tenth decaliter—measure of ten liters
cent	hundred	centimeter—one hundredth of a meter
milli	one-thousandth	milliliter—one thousandth of a liter

PREFIX	MEANING	EXAMPLE
hemi	half	hemiplegia—paralyzed on one side (half of the body)
semi	half	semiconscious—half conscious
macro	large	macrocephalic—having a large head
mega	large, great	megacolon—large or distended colon
micro	small	microscopic—too small to be seen without an instrument
pan	all, entire	pancarditis—inflammation of the entire heart
multi	many	multiform—many shapes
poly	many, much	polyuria—much urine output
tachy	fast	tachycardia—a rapid heart beat or pulse
brady	slow	bradypnea—slow breathing
dys	painful, difficult, bad	dysuria—painful urination
mal	bad, poor, disordered	malpractice—poor practice or care
auto	self	autogenesis—originating within the organism
homo	same	homogenous—the same throughout
hetero	other, different	heterocellular—composed of different types of cells
neo	new	neonate—newborn

GROUP 4 — PREFIXES MEANING *NOT, WITHOUT*

PREFIX	MEANING	EXAMPLE
a, an	without, not, lack	apnea—not breathing anuria—without urine
in, im	not	involuntary—not voluntary immature—not mature

OBJECTIVE 3

Match medical suffixes to their correct definitions.

Suffixes also tell us something about the root and may be organized in similar groups. There are a lot of suffixes, but they are easily mastered.

SUFFIXES MEANING *PERTAINING TO, REFERRING TO*

SUFFIX	EXAMPLE
ac	cardiac—pertaining to the heart
al	renal—pertaining to the kidney
ary	mammary—pertaining to the breast
ic	thoracic—pertaining to the chest
ical	medical—pertaining to medicine
tic	acoustic—pertaining to hearing
ous	fibrous—pertaining to fiber
ar	muscular—referring to muscle

SUFFIXES MEANING *STATE OR CONDITION*

SUFFIX	EXAMPLE
ia	anesthesia—state of being without feeling
iasis	lithiasis—state of having a stone
ity	deformity—condition of being deformed
y	lumpy—state of having lumps
osis	dermatosis—a condition of the skin
ism	dwarfism—the state of being a dwarf

SUFFIX	EXAMPLE
tion	reduction—the condition of reducing

SUFFIXES MEANING *TYPE OF PERSON REFERRED TO*

SUFFIX	MEANING	EXAMPLE
iac	person afflicted with a condition	hemophiliac—someone who has hemophilia
ist	one who specializes in	nephrologist—kidney specialist

SUFFIXES MEANING *SMALL*

SUFFIX	EXAMPLE
ole	arteriole—a small artery
(i)cle	vesicle—a small bladder
(c)ule	molecule—a small mass

SUFFIXES REFERRING TO *SPECIFIC CONDITIONS*

SUFFIX	MEANING	EXAMPLE
algia	pain	arthralgia—joint pain
dynia	pain	cardiodynia—pain in the heart

NOTE: *Algia and dynia* both mean pain. Arthralgia and arthrodynia both mean joint pain. Cardialgia and cardiodynia both mean pain in the heart (or area of the heart). Cephalgia or cephalodynia both sound more impressive than an ordinary headache. Note the use of the combining vowel "o" before *dynia* in each of these terms. Either suffix is correct, but *algia* is probably used more often.

SUFFIXES REFERRING TO *SPECIFIC CONDITIONS*, Continued

SUFFIX	MEANING	EXAMPLE
cele	hernia, swelling	cystocele—hernia or protrusion of the bladder
ectasis	dilation, expansion	bronchiectasis—dilation of the bronchi
emia	blood	hypoglycemia—low level of sugar in the blood
itis	inflammation	gastritis—inflammation of the stomach
malacia	softening	osteomalacia—softening of the bone
megaly	enlargement	hepatomegaly—enlarged liver
oid	resemble	lipoid—resembling fat
oma	tumor	osteoma—a tumor of the bone
osis	increase in blood cells	leukocytosis—an increase in white cells

NOTE: We have already seen that *osis* can mean a condition. Now we have another special meaning of "increase with blood cells only." The correct use depends on the root to which it is attached.

SUFFIXES REFERRING TO *SPECIFIC CONDITIONS*, Continued

SUFFIX	MEANING	EXAMPLE
pathy	disease	myopathy—a disease of the muscle
penia	decrease in blood cells	leukopenia—a decrease in white cells
plasia	development growth	hyperplasia—increased growth

SUFFIX	MEANING	EXAMPLE
plegia	paralysis	hemiplegia—paralysis on one side of the body
phobia	fear	hydrophobia—fear of water
ptosis	prolapse, falling, drooping	hysteroptosis—falling of the uterus
rrhea	discharge, flow	dysmenorrhea—painful menstrual flow
rrhage	burst forth	hemorrhage—blood bursting forth
rrhexis	rupture	angiorrhexis—rupture of a blood vessel
sclerosis	hardening	arteriosclerosis—hardening of an artery
spasm	involuntary contraction twitching	blepharospasm—twitching of the eyelid
trophy	development, growth, nourishment	atrophy—without nourishment (wasting away)

SUFFIXES REFERRING TO *MEASUREMENT, DIAGNOSIS, STUDY*

SUFFIX	MEANING	EXAMPLE
gram	a writing, record	encephalogram—a record of the brain (a record of brain wave tracings)
graph	to write, to record	electrocardiograph—the machine which records electrical activity of the heart

NOTE: *Gram* actually refers to the record produced and *graph* refers to the instrument or machine making the record. An electrocardiograph produces an electrocardiogram. However, in practice, the terms are frequently used interchangeably.

SUFFIXES REFERRING TO *MEASUREMENT, DIAGNOSIS, STUDY*, Continued

SUFFIX	MEANING	EXAMPLE
logy	study of	psychology—study of the mind
meter	measure	thermometer—an instrument which measures heat
scope	an instrument for looking	otoscope—an instrument for looking into the ear
scopy	examination, view	esophagoscopy—an examination of the esophagus

SUFFIXES DESCRIBING *SURGICAL PROCEDURES*

SUFFIX	MEANING	EXAMPLE
ectomy	excision, removal	mastectomy—removal of a breast
otomy	incision, to cut into	phlebotomy—to "cut into" a vein (actually this is what is done when blood is drawn from a vein)
ostomy	forming a mouth or opening	colostomy—an opening in the colon

NOTE: These three suffixes are used frequently and can be a source of confusion. The difference between the three would make a great deal of difference to a patient. To have a part removed (ectomy) is considerably different than to have an incision made (otomy) and closed right away. Likewise, the opening made in an ostomy is one that the patient will have for some time, if not permanently. Thus an ostomy has more serious consequences for a patient than does an otomy.

SUFFIXES DESCRIBING *SURGICAL PROCEDURES*, Continued

SUFFIX	MEANING	EXAMPLE
centesis	surgical puncture	thoracentesis—surgical puncture of the chest
rrhaphy	suture, repair	herniorrhaphy—repair of a hernia
desis	binding, stabilization	arthrodesis—stabilization of a joint
pexy	fixation, suspension	hysteropexy—suspension of the uterus
plasty	formation, restoration of a lost or badly formed feature	rhinoplasty—formation of nose
clasis	break down, refracture	osteoclasis—refracturing a bone
lysis	loosen, free from adhesions, destruction	gastrolysis—loosening of the stomach from adhesions hemolysis—destruction of blood
tripsy	to crush	lithotripsy—crushing of stones

OBJECTIVE 4

Divide medical terms to determine their correct definitions.

The roots, prefixes and suffixes are really keys to help unlock a wealth of information. By taking words apart and analyzing each part, we can determine the meanings of some very complex words.

Mastalgia is actually mast (breast) plus algia (pain). Therefore, the word means breast pain.

mast (breast) + algia (pain) = breast pain

If the word is *mastectomy*, mast still means breast, but ectomy means removal, so mastectomy means breast removal.

Mast (breast) + ectomy (removal) = breast removal

- When dividing a word to determine its meaning, it is often helpful to underline or put parentheses around the different parts.

Consider the word *cholelithiasis*

- Divide it first: (chole) (lith) (iasis)

- Another approach is to work backwards once the word is divided. Using this order reveals that there is an *iasis* (condition) of a *lith* (stone) in the *chole* (gallbladder--a shortening of cholecyst).

Try the word *hyperglycemia*

- Divide it first: (hyper) (glyc) (emia)

- Work backwards: **blood** (emia) which has **sugar** (glyc) in **excess** (hyper)

- Remember that sometimes an o, i, or u may help form a word. *Hysteropexy* is such a word.

(hyster) + o + (pexy)

The **o** is merely a connecting link to aid in pronunciation. The word tells us that there is a **suspension** (pexy) of the **uterus** (hyster).

- Even very long words can be divided and defined following this step by step procedure. *Esophagogastroduodenoscopy* is a good example!

- Divide it first: (Esophag) o (gastr) o (duoden) o (scopy)

- Work backwards: **examination** (scopy) of the **esophagus** (esophag), **stomach** (gastr), and **duodenum** (duodeno--part of the small intestine)

It should not be too difficult to understand why this procedure is referred to as an EGD. On the other hand, it is not too difficult to divide the word to determine its meaning when you know how.

Another word for this procedure is *analysis*. This "word analysis" is the real purpose for studying medical terminology. Reading textbooks and patients' charts becomes much easier with these tools for unlocking the meanings of the complex words. Practice will make the procedure easier and interesting.

OBJECTIVE 5 **Match health care specialties with their correct definitions.**

There are many areas of interest or study contributing to the health care field. Professionals in these areas work together to provide services for the patient or to develop a body of knowledge to guide treatment. Nurses should know the names of some of these areas and services in order to communicate clearly with medical personnel and patients.

Most of these are medical specialties, and many practitioners in these fields are medical doctors. Other practitioners have baccalaureate, master's, or doctorate degrees in their fields.

In the information below, the name of the specialty area is listed first, followed by the title of the practitioner when this is appropriate, and then the definition. Notice how the titles of these areas use various medical roots, prefixes, and suffixes.

- **Adolescent medicine** — Specializes in treating patients during the time of puberty until the completion of physical growth (approximately 11 - 19 years of age)
- **Allergy** (Allergist) — Diagnosis and treatment of allergic reactions
- **Anatomy** — Study of the structure of the human body

- **Anesthesiology** (Anesthesiologist) — Concerned with administering anesthetic agents which make the patient more comfortable during procedures such as surgery or delivery

  NOTE: An anesthesiologist is a medical doctor. An *anesthetist* is not necessarily an MD. There are many Certified Registered Nurse Anesthetists (CRNA) who provide anesthesia.

- **Bacteriology** (Bacteriologist) — The study of infectious agents in body fluids and tissue

- **Biochemistry** (Biochemist) — The study of chemical reactions in living organisms.

- **Cardiology** (Cardiologist) — Study of the heart and treatment of heart conditions

- **Chiropractic** (Chiropractor) — A specialist in this field holds a Doctor of Chiropractic degree. Practitioners use manipulative types of therapy.

- **Dentistry** (Dentist) — A specialist in this field would hold a Doctor of Dental Surgery degree. This practitioner diagnoses and treats problems of the teeth and gums.

- **Dermatology** (Dermatologist) — The study of skin disorders

- **Endocrinology** (Endocrinologist) — Diagnosis and treatment of problems involving the endocrine glands and the hormones they secrete

- **Epidemiology** (Epidemiologist) — Study of and attempt to control outbreak of diseases

- **Family Practice** (Family Practitioner) — Treatment of a broad range of disorders as well as patients of all ages

  NOTE: Family practice was formerly known as "General Practice."

- **Gastroenterology** (Gastroenterologist) — Diagnosis and treatment of disorders of the stomach and intestines

- **Genetics** (Geneticist) — The study of heredity and inherited conditions

- **Gerontology** (Gerontologist) — Concerned with diseases and problems of aging

  NOTE: "Geriatrics" also refers to problems of the elderly.

- **Gynecology** (Gynecologist) — Diagnosis and treatment of diseases of the female reproductive system
- **Hematology** (Hematologist) — Diagnosis and treatment of disorders of the blood and blood-forming organs
- **Infectious Disease** — Study of the transmission of communicable disease
- **Immunology** (Immunologist) — Concerned with the effects of harmful agents to the body. These effects may be produced by pathogenic organisms or allergy.
- **Industrial Medicine** — Concerned with hazards of the work place and treatment of conditions occurring as a result of these hazards.

  NOTE: Industrial medicine is also called "Occupational Medicine."

- **Internal Medicine** (Internist) — Concerned with diagnosis and treatment (especially non-surgical treatment) of the internal organs. Cardiology, endocrinology, nephrology and other subspecialties fall under the field of internal medicine.
- **Microbiology** (Microbiologist) — The study of minute living organisms
- **Neonatology** (Neonatologist) — Concerned with caring for the newborn, and especially the premature newborn
- **Nephrology** (Nephrologist) — The study and treatment of diseases of the kidney.
- **Neurology** (Neurologist) — Concerned with diagnosis and treatment of disorders of the central nervous system
- **Neurosurgery** (Neurosurgeon) — Provides surgical treatment of the brain, spinal cord, and nerves

- **Obstetrics** (Obstetrician) — Concerned with the care of women during pregnancy, labor, delivery, and the post-partum period
- **Oncology** (Oncologist) — Provides diagnosis and treatment of malignancy (cancer)
- **Ophthalmology** (Ophthalmologist) — Diagnosis and treatment, including surgery, of the eye by a medical doctor
- **Optometry** (Optometrist) — The practitioner holds a Doctor of Optometry degree and limits practice to measurement of sight for corrective lenses.
- **Oral Surgery** (Oral Surgeon) — Deals with surgical treatment of the mouth. Practitioners are usually trained as dentists and specialize in surgical procedures.
- **Orthodontics** (Orthodontist) — A division of dentistry concerned with correction or prevention of problems with position of teeth.
- **Orthopedics** (Orthopedist) — Diagnosis and treatment, including surgery, of bones, muscles, and joints.
- **Osteopathy** (Osteopath) — The specialist in this field holds a Doctor of Osteopathy degree. A variety of disorders may be treated by manipulation or by traditional types of medical treatment.
- **Otorhinolaryngology** (Otorhinolaryngologist) — Diagnosis and treatment, including surgery, of the ears, nose, and throat
- **Pathology** (Pathologist) — Concerned with confirmation of diagnosis by examining tissue samples
- **Pediatrics** (Pediatrician) — Concerned with the prevention, diagnosis, and treatment of disease in children

  NOTE: There are many pediatric sub-specialties such as pediatric surgery, pediatric cardiology, pediatric nephrology, etc.
- **Pedodontics** (Pedodontist) — An area of dentistry concerned with the care of children's teeth

- **Physical Medicine** — Deals with treatment of disorders by use of physical measures such as heat application, manipulation of limbs, and fitting with corrective devices such as braces. A goal of this discipline is to allow the patient to accomplish the activities of daily living.

  NOTE: Another name for this discipline is "Rehabilitative Medicine."

- **Physiology** (Physiologist) — Study of the function of the body

- **Plastic surgery** (Plastic Surgeon) – Deals with surgical restoration and repair of the body

- **Podiatry** (Podiatrist) — A specialist in this field holds a Doctor of Podiatry degree and diagnoses and treats disorders of the foot. Treatment may include surgery.

- **Proctology** (Proctologist) — This specialty diagnoses and treats disorders of the colon, rectum, and anus.

- **Psychiatry** (Psychiatrist) — Concerned with the diagnosis, treatment, and prevention of mental disorders. A psychiatrist is a medical doctor.

- **Psychology** (Psychologist) — Study of behavior. Practitioners in this field are not medical doctors, but they may diagnose and treat mental disorders without the use of medication.

- **Pulmonary Disease** — Concerned with disorders involving the lungs and breathing

- **Radiology** (Radiologist) — This discipline uses X-rays and similar methods to diagnose and treat disorders.

- **Rheumatology** (Rheumatologist) — Concerned with diseases causing pain in joints and muscles

- **Sports Medicine** — Practitioners diagnose, treat, and try to prevent injuries connected with athletics.

- **Surgery** (Surgeon) — Treatment of disorders requiring surgical intervention. There are many subspecialties, such as plastic surgery and thoracic surgery.

  NOTE: A "General Surgeon" performs a variety of surgical procedures not requiring specialized techniques.

- **Thoracic Surgery** (Thoracic Surgeon) — Surgically treats disorders of the chest cavity.

- **Trauma Medicine** — A field that diagnoses and treats victims of accidents and acute illness

  NOTE: Trauma medicine is also called "Emergency Medicine."

- **Urology** (Urologist) — Diagnosis and treatment of disorders of the urinary system. Treatment may include surgery.

OBJECTIVE 6

Translate medical abbreviations into terms and terms into abbreviations.

Abbreviations can be time and work savers or they can cause confusion and danger or injury. Neil M. Davis indicates the value and risk of abbreviating in the title of his booklet, *Medical Abbreviations: 2300 Conveniences at the Expense of Communications and Safety*. It is convenient to write and speak in abbreviations to avoid the tongue-twisting words and complex spellings found in the health care field. But if the person reading or hearing the message can't understand it, little is accomplished. In fact, it could be very dangerous for the patient if our messages are not understood.

It is not uncommon to hear nurses questioning one another about the meaning of some abbreviation. New abbreviations seem to sprout up like mushrooms, and old abbreviations fall by the wayside. There will be considerable variation in lists of abbreviations found in nursing textbooks. Different parts of the country use different abbreviations. Even different hospitals in the same city will use different abbreviations. And even though most hospitals have an established list of abbreviations that are accepted at that facility, the use of specific abbreviations will be introduced or excluded with changes in the staff.

The same abbreviation may be written in different ways by different people. The use of capitalization, periods, and lines over some forms will vary depending on who is doing the writing. Some would argue for the correctness or incorrectness of one form or the other, but variety abounds. The picture is further complicated by the fact that the same combination of letters may mean different things in different situations. PT (usually capitalized, but not always) can mean physical therapy and pt (usually not capitalized, but not always) is patient. So we can send our pt to PT and use the same combination for different meanings. Four forms $\overline{c}$ (with), $\overline{s}$ (without), $\overline{p}$ (after) and $\overline{q}$ (every) can save us a great deal of time and shorten charting. Some will insist that the letters appear with the line over them and others will not.

It is not too difficult to see how W/C (it may not always be capitalized) stands for wheelchairs. There is a W and a C present in the word being abbreviated. It is more difficult to see how NPO can mean "nothing by mouth." The answer is that we are mixing English and Latin, and the "real" translation is "nothing per os" which means "nothing by mouth." The abbreviation PRN is also the abbreviation of a Latin phrase, *pro re nata* which translates "as needed" or "as required." There are a number of other similar examples.

You should remember two important points when using abbreviations. First, do not make up new abbreviations because they make sense to you. They must also mean something to those reading your message. Remember that the chart is a legal document and everything found in it should be absolutely clear and correct. Second, it is not absolutely necessary to use abbreviations. They save time, but only if the intended message is clear to all. If you are unsure about how to abbreviate what you wish to communicate, write it out without abbreviations. Some attempts at abbreviation can be very humorous, but also very dangerous.

Abbreviations can be a great time-saver, but use them wisely!

Abbreviations for documenting patients' conditions and the nursing care given

NOTE: These abbreviations are used frequently by doctors in communicating their orders and by nurses and other health care professionals.

$\bar{c}$	with
$\bar{s}$	without
pt.	patient
c/o	complains of
tol.	as tolerated
HOB	head of bed
amb.	ambulatory
OOB	out of bed
BRP	bathroom privileges
W/C	wheelchair
per	by, by means of
via	by, by means of
p.o.	by mouth (taken from the Latin, *per os*)
NPO	nothing by mouth
I & O	intake and output
DAT	diet as tolerated
liq.	liquid
cl. liq.	clear liquid
Gen.	general
Reg.	regular
med	medicine
IM	intramuscular
subq or s.c.	subcutaneous
lab	laboratory
Tx.	treatment, traction
T,C,DB	turn, cough, deep breathe
DC	discontinue
hypo	hypodermic
IV	intravenous
KVO	keep vein open
hep lock	heparin lock
hyperal	hyperalimentation
TPN	total parenteral nutrition
VS	vital signs
temp.	temperature

TPR	temperature, pulse, respiration
BP	blood pressure
R	rectal
Ax	axillary
CVP	central venous pressure
cath	catheter
E	enema
SSE	soap solution enema, soap suds enema
TWE	tap water enema
BM	bowel movement
drsg.	dressing
DSD	dry sterile dressing
HWP	hot wet packs
HWB	hot water bottle
H_2O or Aq.	water
DW	dextrose in water (D_5W would indicate a 5% solution of dextrose in water)
NS	normal saline
NSS	normal saline solution
N/G	nasogastric
DTV	due to void
FF	force fluids
O_2	oxygen
Δ	change
V.O.	verbal order
T.O.	telephone order
BSC	bedside commode

Abbreviations that deal with measurements and amounts

amt.	amount
sm.	small
mod.	moderate
lg.	large
approx.	approximately
cc	cubic centimeter

ml	milliliter
L	liter (1000 ml)
wt.	weight
ht.	height
mg	milligram
Gm	gram
Kg	kilogram
oz.	ounce
lb.	pound
mm	millimeter
cm	centimeter
in	inch
ft	feet
tsp.	teaspoon
T or TBSP	tablespoon
F.	Fahrenheit
C.	Celsius, centigrade
°	degree
gtt.	drop
gr.	grain
U.	unit
I.U.	international unit
mEq.	milliequivalent
Fr.	French
%	percent
q.s.	quantity sufficient
fl.	fluid
aa	of each
ss	one half
↑	above, up, elevate
↓	lower, down, decrease
=	equal
≠	unequal
>	greater than
<	less than

Abbreviations that help to identify specific areas of the body

abd	abdomen
LUQ	left upper quadrant
LLQ	left lower quadrant
RUQ	right upper quadrant
RLQ	right lower quadrant
trach	trachea
ENT	ear, nose, throat
ORL	otorhinolaryngology
o.u.	both eyes
o.d.	right eye
o.s.	left eye
CNS	central nervous system
GI	gastrointestinal
GB	gall bladder
GU	genitourinary
S.P.	supra-pubic
ant.	anterior
post.	posterior
lat.	lateral (side)
A/P	anterior and posterior
Rt., R ,Ⓡ	right
Lt., L ,Ⓛ	left

Abbreviations that name various diagnostic procedures

UA	urinalysis
CCUA	clean cath urinalysis
DUA	diabetic urinalysis
CBC	complete blood count
RBC	red blood cells
WBC	white blood cells
diff	differential
hct.	hematocrit

hgb.	hemoglobin
H&H	hemoglobin and hematocrit
FBS	fasting blood sugar
FSBS	finger stick blood sugar
BUN	blood urea nitrogen
Chem____	specified group of blood (7, 18, 21, etc.) tests
VDRL or RPR	test for syphilis
C & S	culture and sensitivity
sp. gr.	specific gravity
cat scan, CT scan	computerized axial tomography
MRI	magnetic resonance imagery
LP	lumbar puncture
EEG	electroencephalogram
ECG or EKG	electrocardiogram
EMG	electromyogram
UGI	upper gastrointestinal
BE	barium enema
IVP	intravenous pyelogram
BOP	blood, ova, and parasites
EGD	esophagogastroduodenoscopy
pro time, PT	prothrombin time

Abbreviations that deal with time

p̄	after
q̄	every
ad lib	as desired (time and amount)
PRN	as needed or required
stat	immediately
A.M.	morning
P.M.	afternoon or evening
noc.	night
HS	hour of sleep
N	noon
M or MN	midnight

min.	minute
wks.	weeks
mos.	months
yr.	year
h or hr or °	hour
q.h.	every hour
q_____h	every _____ (1, 2, 3, etc.) hour(s)
q.d.	every day
q.o.d.	every other day
b.i.d.	twice a day
t.i.d.	three times a day
q.i.d.	four times a day
a.c.	before meals
p.c.	after meals
pre-op	before surgery
post-op	after surgery
cont.	continuous(ly), continue
x	times (referring to number or duration)

SUPPLEMENT 1

USE MEDICAL TERMINOLOGY

The following groups of abbreviations are probably not so critical in the vocabulary of a nurse. At first, the nurse will observe others using them. However, it will not be long before the nurse is also proficient in using these abbreviations.

Abbreviations for diagnoses or surgical procedures

URI	upper respiratory infection
T & A	tonsillectomy and adenoidectomy
trach	tracheostomy, tracheotomy
COPD	chronic obstructive pulmonary disease
MI	myocardial infarction
CHF	congestive heart failure
ASHD	arterial sclerotic heart disease
CAD	coronary artery disease
TIA	transient ischemic attack
DVT	Deep vein thrombosis
CVA	Cerebral vascular accident
CABG	Coronary artery bypass graft
exp. lap.	exploratory laparotomy
Appy	appendectomy
Chole	cholecystectomy
PEG	Percutaneous esophageal gastrostomy
UTI	urinary tract infection
Cysto	cystoscopy
TUR	Transurethral resection
TURP	Transurethral resection (of the prostate)
PID	pelvic inflammatory disease
D & C	dilatation and curettage
hyst.	hysterectomy
vag. hyst.	vaginal hysterectomy
abd. hyst.	abdominal hysterectomy
TAH	total abdominal hysterectomy
VBAC	vaginal birth after Caesarean

VD	venereal disease
STD	sexually transmitted disease
AIDS	acquired immune deficiency syndrome
PMS	premenstrual syndrome
FUO	fever of unknown origin
ARDS	Adult respiratory distress syndrome
IDDM	Insulin dependent diabetes mellitus
Ca	cancer
Fx.	fracture
ORIF	open reduction, internal fixation
I&D	incision and drainage
MVA	motor vehicle accident
GSW	gunshot wound
MS	multiple sclerosis
MD	muscular dystrophy
DOA	dead on arrival

Abbreviations for identifying medical personnel and hospital departments

R.N.	registered nurse
ADN	associate degree nurse
BSN	baccalaureate degree nurse
LPN	licensed practical nurse
LVN	licensed vocational nurse
GN	graduate nurse
GPN	graduate practical nurse
SN	student nurse
NS	nursing student
NE	nursing extern
SPN	student practical nurse
N.A.	nursing assistant
CNA	certified nursing assistant
CMA	certified medication aide
DON	director of nursing

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ADON	assistant director of nursing
M.D.	medical doctor
D.O.	doctor of osteopathy
DDS	doctor of dentistry
EMT	emergency medical technician
RPT	registered physical therapist
RMT	registered medical technician
RD	registered dietician
MSW	master of social work
CRNA	certified registered nurse anethestist
P.A.	physician's assistant
RT	respiratory therapy
PT	physical therapy
OT	occupational therapy
CS or CSS	central sterile supply
OR	operating room
RR	recovery room
PAR	post-anesthesia room
ER	emergency room
ED	emergency department
OPD	outpatient department
ASU	ambulatory surgery unit
ICU	intensive care unit
CCU	coronary care unit
PCCU	post-coronary care unit
SICU	surgical intensive care unit
MICU	medical intensive care unit
NICU	neonatal intensive care unit
peds	pediatrics
OB	obstetrics
PP	post-partum
gyn	gynecology
psych	psychology or psychiatry
LTC	long term care
ICF	intermediate care facility

SNF	skilled nursing facility
ECF	extended care facility

Abbreviations for chemical symbols or compounds used in health care

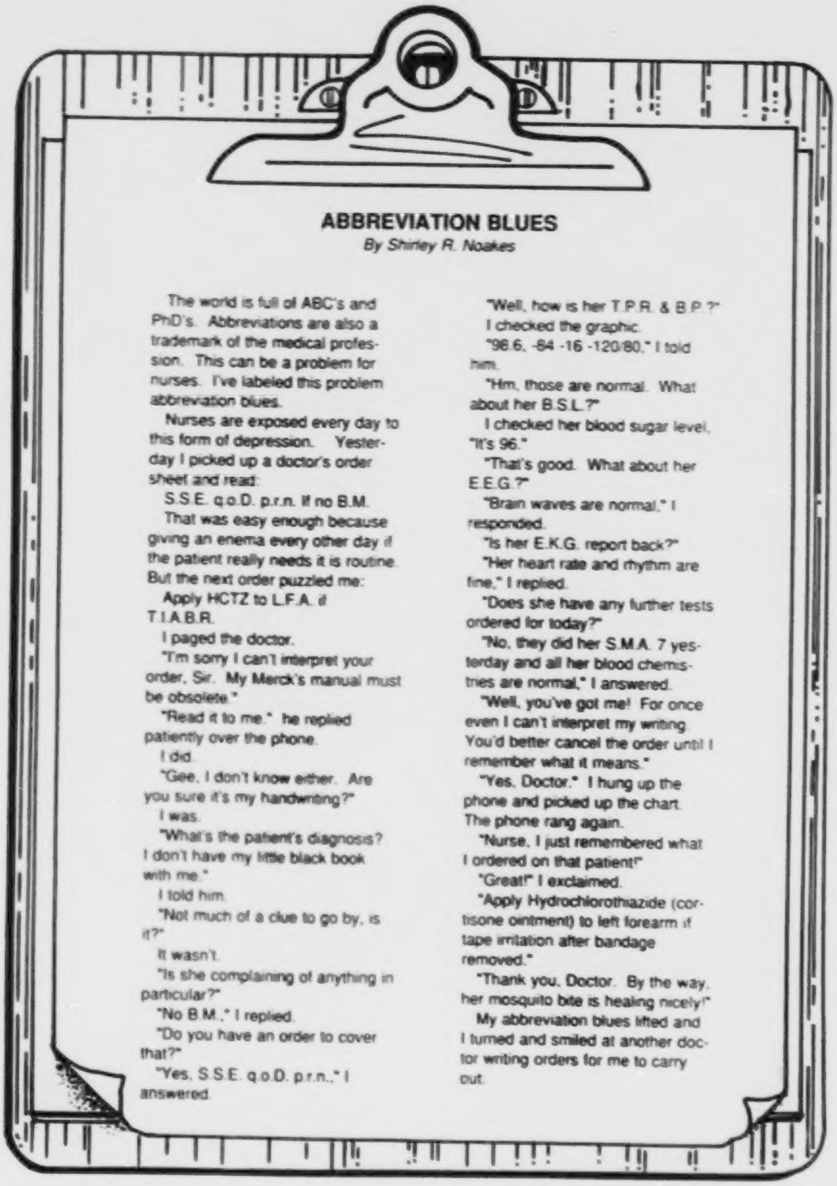
CO_2	carbon dioxide
$Na+$	sodium
$K+$	potassium
Cl	chloride
Ca	calcium
Fe	iron
Ba	barium
H_2O_2	hydrogen peroxide
$AgNO_3$	silver nitrate
Hg	mercury

Abbreviations for recording histories and physicals, used primarily by physicians

Tx.	treatment
Rx.	take, prescription
Sig.	let it be marked
W/D	well-developed
W/N	well-nourished
Y/O	years old
CC	chief complaint
PI	present illness
ADL	activities of daily living
FH	family history
PH	previous (past) history
HPI	history of present illness
H & P	history and physical
ROS	review of systems
PTA	previous (prior) to admission (arrival)

WNL	within normal limits
Imp.	impression
R/O	rule out
LMD	local medical doctor
PERLA	pupils equally reactive to light and accommodation
PERRLA	pupils equally round and reactive to light and accommodation
LMP	last menstrual period
ROM	range of motion
N & V	nausea and vomiting
NKA	no known allergies
DTR's	deep tendon reflexes
AMA	against medical advice
poss.	possible
S/P	status post (followed by illness)
DNR	do not resuscitate
Dx.	diagnosis
♀	female
♂	male

NOTE: Two practical nursing students (one male and one female) had the following discussion after first seeing the symbols for male and female. The female first said, "Oh, that will be easy to remember, because it's a plus to be a female." To which the male replied, "But, the male is on his way up!" "No," returned the female, "He's just moving over to get out of the way."



ABBREVIATION BLUES

By Shirley R. Noakes

The world is full of ABC's and PhD's. Abbreviations are also a trademark of the medical profession. This can be a problem for nurses. I've labeled this problem abbreviation blues.

Nurses are exposed every day to this form of depression. Yesterday I picked up a doctor's order sheet and read:

S.S.E. q.o.D. p.r.n. If no B.M.

That was easy enough because giving an enema every other day if the patient really needs it is routine. But the next order puzzled me:

Apply HCTZ to L.F.A. if T.I.A.B.R.

I paged the doctor.

"I'm sorry I can't interpret your order, Sir. My Merck's manual must be obsolete."

"Read it to me," he replied patiently over the phone.

I did.

"Gee, I don't know either. Are you sure it's my handwriting?"

I was.

"What's the patient's diagnosis? I don't have my little black book with me."

I told him.

"Not much of a clue to go by, is it?"

It wasn't.

"Is she complaining of anything in particular?"

"No B.M.," I replied.

"Do you have an order to cover that?"

"Yes, S.S.E. q.o.D. p.r.n.," I answered.

"Well, how is her T.P.R. & B.P.?"

I checked the graphic.

"98.6, -84 -16 -120/80," I told him.

"Hm, those are normal. What about her B.S.L.?"

I checked her blood sugar level. "It's 96."

"That's good. What about her E.E.G.?"

"Brain waves are normal," I responded.

"Is her E.K.G. report back?"

"Her heart rate and rhythm are fine," I replied.

"Does she have any further tests ordered for today?"

"No, they did her S.M.A. 7 yesterday and all her blood chemistries are normal," I answered.

"Well, you've got me! For once even I can't interpret my writing. You'd better cancel the order until I remember what it means."

"Yes, Doctor." I hung up the phone and picked up the chart. The phone rang again.

"Nurse, I just remembered what I ordered on that patient!"

"Great!" I exclaimed.

"Apply Hydrochlorothiazide (cortisone ointment) to left forearm if tape irritation after bandage removed."

"Thank you, Doctor. By the way, her mosquito bite is healing nicely!"

My abbreviation blues lifted and I turned and smiled at another doctor writing orders for me to carry out.

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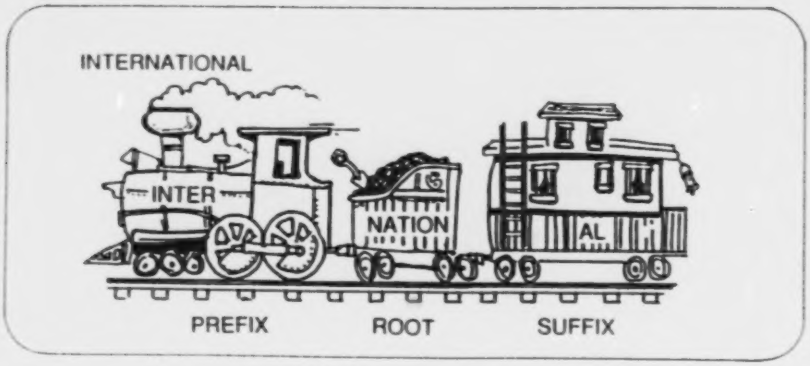
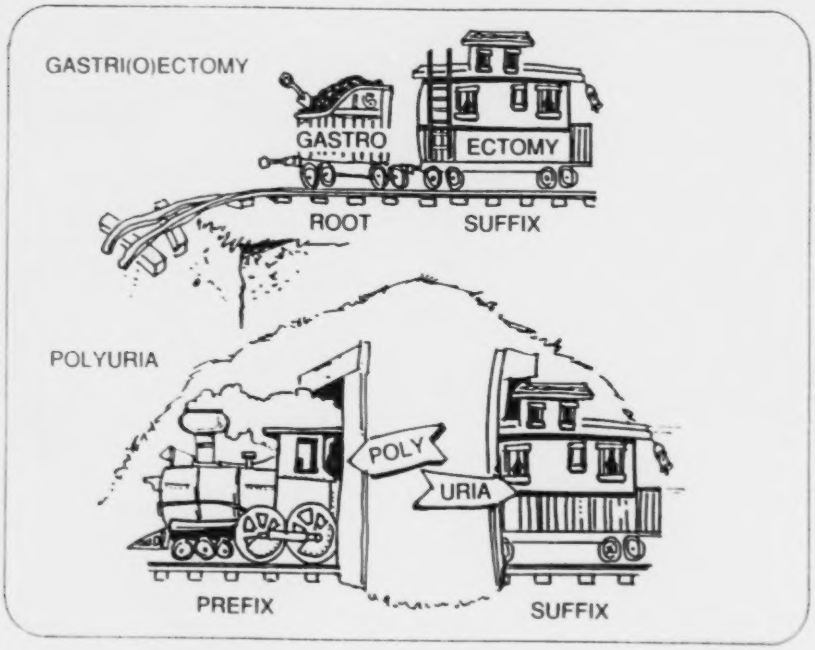

INTERNATIONAL
INTER
NATION
AL
PREFIX
ROOT
SUFFIX

EXAMPLES OF COMBINING WORD ELEMENTS

Prefix	*Root*	*Suffix*	*Word*
dis	agree	able	disagreeable
	war	like	warlike
un	pardon	able	unpardonable
inter	nation	al	international
speed(o)	meter		speedometer
	beauty	full	beautiful


GASTRI(O)ECTOMY
GASTRO
ECTOMY
ROOT
SUFFIX
POLYURIA
POLY
URIA
PREFIX
SUFFIX

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ACTIVITY SHEET 1

USE MEDICAL TERMINOLOGY

PRACTICE IDENTIFYING ROOT WORDS

NAME ______________________________

DIRECTIONS

Part 1

Match the disease on the right with the part of the body affected listed on the left. Write the correct letters in the blanks.

___1.	Nose	a.	Stomatitis
___2.	Lip	b.	Ophthalmia
___3.	Ear	c.	Perennial rhinitis
___4.	Mouth	d.	Otitis media
___5.	Tongue	e.	Cheilocarcinoma
___6.	Eye	f.	Glossitis

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

DIRECTIONS

Part 2

Write the answers in the blanks.

Which parts of the body or what function do the following nerves supply?

1. Oculomotor nerve ______________________________
2. Lingual nerve ______________________________
3. Buccal nerve ______________________________
4. Optic nerve ______________________________
5. Auditory nerve ______________________________

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Where in the body are the following?

6. Pedal pulse____________________

7. Brachial artery____________________

8. Mammary gland____________________

9. Intercostal muscles____________________

On which parts of the body are the following surgical procedures carried out?

10. Laparotomy____________________

11. Mastectomy____________________

12. Thoracocentesis____________________

13. Cheiroplasty____________________

On which parts of the body are the following surgical procedures carried out?

14. Hysterectomy____________________

15. Vesicofixation____________________

16. Ureterostomy____________________

17. Oophoropexy____________________

18. Ovariotomy____________________

19. Cholecystectomy ____________________

20. Nephrorrhaphy ____________________

USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for: READING and SCIENCE

- Introduce the assignment to the students by discussing why reading and science skills are important.
- Discuss with them the following skills which are relevant to this task.

READING

— Applying word analysis techniques
— Using content area vocabulary

SCIENCE

— Investigating and applying principles of anatomy and physiology

- Review the concept of root words used to identify the body part.
- Instruct students in the use of mnemonic devices and other techniques to aid memorization of Latin and Greek roots:

NOTE: Instruct students that nonsense and ridiculous associations are easier to remember than associations that have real meaning.

- Association — Connecting new term to something you already know

EXAMPLE: *ocul* as in bin*ocul*ars

- Visualization — Making a mental picture

EXAMPLE: --ORTHO--> = straight (as an arrow)

- Sounding out — Making an image with sound

EXAMPLE: Carti in my hearty
Angi lives in a blood vessel
My, oh my—my muscle

- Acronyms or sentences — Using the first letter of the word to make another word or a sentence

  EXAMPLE: 12 cranial nerves: **O**h, **O**h, **O**h, **t**o **t**ouch **a**nd **f**eel **v**ery **g**ood **v**elvet, **a**h

  (Olfactory, Optic, Oculomotor, trochlear, trigeminal, abducens, facial, vestibulocochlear, glossopharyngeal, vagus, accessory, hypoglossal)

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ACTIVITY SHEET 2

USE MEDICAL TERMINOLOGY

PRACTICE IDENTIFYING PREFIXES AND ROOTS

NAME ____________________________

DIRECTIONS

Part 1

Choose the correct word from the right hand column which matches the definition below. Use only one word for each definition. Write the letter of the correct word in the blank.

____1. abnormally large head

____2. abnormally small nose

____3. frequent urination

____4. excessive sugar in the blood

____5. not breathing

____6. within a muscle

____7. within the cranium

____8. above the breast plate

____9. around the kidney

____10. around the heart

a. Circumrenal

b. Endocranial

c. Hyperglycemia

d. Intramuscular

e. Macrocephaly

f. Microrhinia

g. Pericardial

h. Polyuria

i. Apnea

j. Suprasternal

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Part 2

____1. back of the colon

____2. abnormal redness of skin

____3. pertaining to both sides

____4. before birth

____5. between the ribs

____6. white cell

____7. pertaining to the region above the stomach

____8. after surgery

____9. painful urination

____10. fast heart rate

a. Ambilateral

b. Dysuria

c. Epigastric

d. Tachycardia

e. Erythrodermic

f. Intercostal

g. Leukocyte

h. Prenatal

i. Retrocolic

j. Postoperative

DIRECTIONS

Part 3

Add the correct prefixes to the words in the left column to make them state the meaning listed in the right column.

1. _ _ _ _ _ cutaneous	Across the skin
2. _ _ manual	Two hands
3. _ _ _ _ osis	Condition of being blue
4. _ _ _ _ _ pnea	Slow breathing
5. _ _ _ _ _ _ _ _ opedial	Left-footed

USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 2

Skill development for: READING and SCIENCE

- Introduce the assignment to the students by discussing why reading and science skills are important.
- Discuss with them the following skills which are relevant to this task.

READING

- Applying word analysis techniques
- Using content area vocabulary

SCIENCE

- Investigating and applying principles of anatomy and physiology

- Review the concept of root words used to identify a body part.
- Stress that if students learn to recognize the basic root, suffixes, and prefixes, they will not have to memorize all the variations.
- Use repetitive drills to help students distinguish roots and prefixes.
- Point out to students that prefixes have antonyms that can aid in remembering meanings.

EXAMPLE: *circum* — around and *intra* — in
micro — small and *macro* — large
supra — over and *sub* — under

- Emphasize the fact that a prefix can have more than one meaning.

EXAMPLE: *Supra* can mean "above" or "more than".

- Emphasize that more than one prefix may have the same meaning.

  EXAMPLE: *Endo* and *intra* mean "within".

- Stress the use of prefixes to define quantities.

  EXAMPLE: *Uni* — one
  Poly — many
  Tri — three

  Show students how to count from one to ten using prefixes:

  mono or *uni* — one
  bi or *duo* — two
  tri — three
  quad — four
  pent — five
  sex or *hex* — six
  hept or *sept* — seven
  oct — eight
  non — nine
  dec — ten

- Stress to the student that prefixes are used to describe the root. They can clarify location, size, quantity, quality, color, time, or scope.

  EXAMPLE: *circum* — around
  micro — small
  mono — one
  mal — bad
  leuko — white
  post — after

- Instruct students to use prefixes they are familiar with to build associations with new terms.

  EXAMPLE: "Bi" in bicycle can be used to help you remember prefix meanings in words such as bilateral.

- Connect the medical terms to the students' studies in anatomy and physiology.

ACTIVITY SHEET 3

USE MEDICAL TERMINOLOGY

PRACTICE IDENTIFYING SUFFIXES

NAME ______________________________

DIRECTIONS

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Part 1

Add the correct suffix to form the word indicated.

1.	nephrolith _ _ _ _ _	Presence of a kidney stone (state of having one)
2.	gastr _ _ _ _	Inflammation of the stomach
3.	hepato _ _ _ _ _ _	Enlarged liver
4.	neuro _ _ _ _ _	Disease of the nervous system
5.	nephro _ _ _ _ _ _	Dropped or displaced kidney
6.	angio _ _ _ _ _ _ _	Rupture of a blood vessel
7.	cephalo _ _ _ _ _	Headache: pain in the head
8.	cephal _ _ _ _ _	Headache: pain in the head (different from above)
9.	mammo _ _ _ _ _ _	Restoration of breast tissue
10.	lip _ _ _	Resembling fat
11.	leuko _ _ _ _ _	White mucous discharge from vagina or cervical canal
12.	blepharo _ _ _ _ _	Spasm or twitching of the eyelid
13.	dermat _ _ _ _	Abnormal condition of the skin
14.	osteo _ _ _ _ _ _ _	Softening of bone
15.	cysto _ _ _ _	Hernia of the bladder

DIRECTIONS

Part 2

Write the letter of the correct definition in the blank.

____1. Nephrectomy

____2. Colostomy

____3. Cholecystectomy

____4. Leukocytopenia

____5. Lithotripsy

____6. Hysteropexy

____7. Cystotomy

____8. Cystoscopy

____9. Arteriogram

____10. Electrocardiograph

a. Crushing of a stone

b. Examination of the bladder

c. Removal of a kidney

d. A record of arteries

e. Suspension of the uterus

f. A decrease of white blood cells

g. Removal of the gall bladder

h. A machine to record heart activity

i. Permanent opening into the large intestine

j. Incision into the bladder

USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 3

Skill development for: READING and SCIENCE

- Introduce the assignment to the students by discussing why reading and science skills are important.
- Discuss with them the following skills which are relevant to this task.

READING

— Applying word analysis techniques
— Using content area vocabulary

SCIENCE

— Investigating and applying principles of anatomy and physiology

- Review the concept of root words used to identify a body part.
- Stress that if students learn to recognize the basic roots, suffixes, and prefixes, they will not have to memorize all the variations.
- Use repetitive drills to help students distinguish root, suffix, and prefix.
- Explain to the students that adding a suffix to a word adds additional information to the word.

EXAMPLE:	Root word	Suffix	Meaning of suffix
	tonsil	*itis*	inflammation

Root and suffix combine to give you the added information that the tonsil is inflamed and the new form is "tonsillitis".

- Explain that the same suffix may be used with many different roots.

EXAMPLE: The suffix *ology*, meaning "the study of," may be added to many root words such as biology, pathology, psychology, and neurology.

- Instruct students to use the technique of association to help them learn and remember Greek and Latin suffixes.
    - Association — Connecting a new term to something you already know.

EXAMPLE: In the word geography, *graphy*, meaning "to record," has the same meaning as in the words electrocardiography and mammography.

- Connect the medical terms to students' studies in anatomy and physiology.

ACTIVITY SHEET 4

USE MEDICAL TERMINOLOGY

PRACTICE IDENTIFYING HEALTH CARE SPECIALTIES

Name ______________________________

DIRECTIONS

Write the name of the medical specialty in the blank.

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

Life Science Skills
- Investigate/apply principles of anatomy/physiology

1. All ages and all types of problems would be seen by a doctor described as a/an ______________________________
2. Two specialists who deal with emotional problems are a/an ______________________________
3. and a/an ______________________________
4. Making surgery painless is the job of a/an ______________________________
5. or a/an ______________________________
6. Diagnosis of diseases involving the heart, lungs, stomach or other internal organs would be the job of a/an ______________________________
7. A woman expecting a baby would be seen by a/an ______________________________
8. Infants and children would be seen by a/an ______________________________
9. Problems associated with aging would be treated by a/n ______________________________
10. Tissue samples would be studied by a/an ______________________________

11. An emergency room doctor would be a specialist in

____

12. A patient who has cancer might be helped by a/an

____

13. Reconstructive surgery would be performed by a/an

____

14. A patient who has trouble after eating would probably be seen by a/an____

15. Disorders of the bones, muscles, or joints would be treated by a/an____

USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 4

Skill development for: READING and SCIENCE

- Introduce the assignment to the students by discussing why reading and science skills are important.
- Discuss with them the following skills which are relevant to this task.

READING

- Applying word analysis techniques
- Using content area vocabulary

SCIENCE

- Investigating and applying principles of anatomy and physiology

- Review the concept of root words used to identify a body part.
- Stress that if students learn to recognize the basic roots, suffixes, and prefixes, they will not have to memorize all the variations.
- Specifically discuss the suffix *logy*, meaning "study of," and the suffix *ist*, meaning "doer or maker".
- Encourage students to investigate the listings under "Physicians" in their local phone directory.
- Instruct students in the use of various techniques to help them learn and remember Latin and Greek roots.

NOTE: Nonsense and ridiculous associations are easier to remember than associations that have real meaning.

- Association — connecting new term to something you already know

  EXAMPLE: Associating health care specialists that you know with the proper name of their specialties: cardiologist instead of heart specialist

  Old gerontologists don't die, they just take Geritol.

- Visualization — making a mental picture

- Sounding out — making an image with sounds

  EXAMPLE: Radiologist: Dr. Ray advertised X-rays on the radio.

- Connect the medical terms to students' studies in anatomy and physiology.

ACTIVITY SHEET 5

USE MEDICAL TERMINOLOGY

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

Life Science Skills
- Investigate/apply principles of anatomy/physiology

CROSSWORD PUZZLE

Across Clues

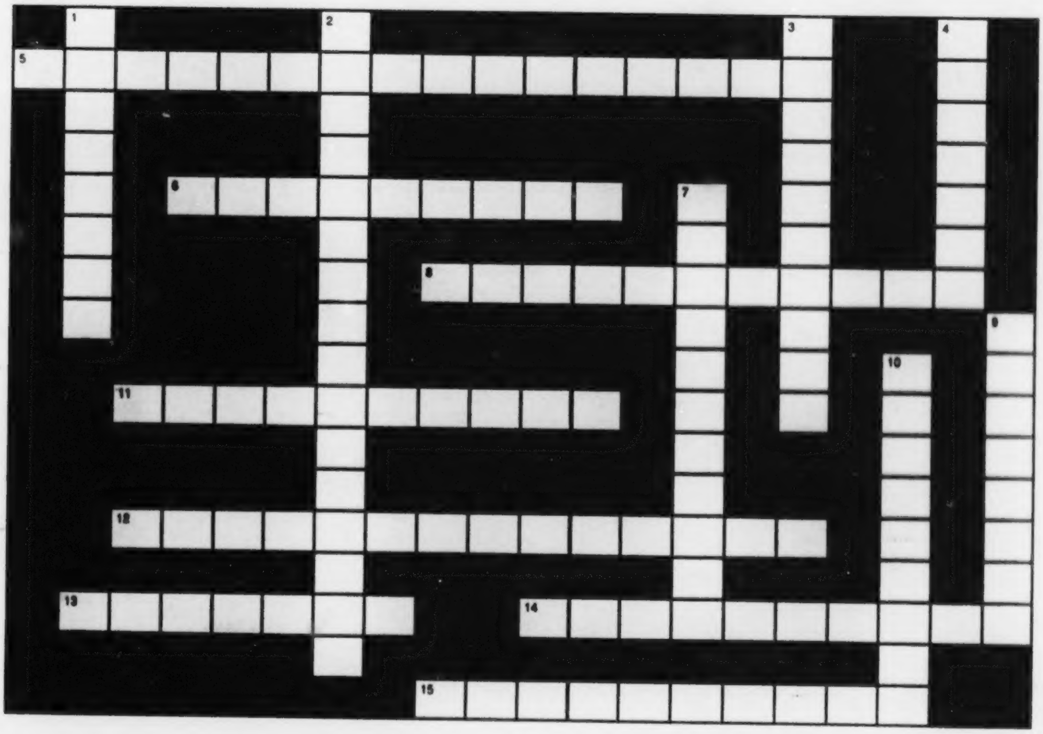
5. Concerned with diagnosis and treatment of disorders of the internal organs
6. Diagnosis and treatment of the central nervous system
8. Concerned with caring for the newborn
11. Care of women during pregnancy, labor, delivery, and the post-partum period
12. Provides care for patients of all ages and a with a variety of diseases
13. Diagnosis and treatment of the urinary system
14. Study of the function of the body
15. Diagnosis and treatment of mental disorders

Down Clues

1. Diagnosis and treatment of malignancy
2. Diagnosis and treatment of disorders of the stomach and intestines
3. Diagnosis and treatment of disorders of the kidneys
4. Study of the structure of the body
7. Diagnosis and treatment of the bones, muscles, and joints
9. Diagnosis and treatment of disorders of the feet
10. Use of X-ray for diagnosis and treatment

WORD LIST: MEDICAL SPECIALTIES

ANATOMY
FAMILYMEDICINE
GASTROENTEROLOGY
INTERNALMEDICINE
NEUROLOGY
NEONATOLOGY
NEPHROLOGY
OBSTETRICS
ONCOLOGY
ORTHOPEDICS
PHYSIOLOGY
PODIATRY
PSYCHIATRY
RADIOLOGY
UROLOGY



USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 5

- Introduce the assignment to the students by discussing why reading and science skills are important.
- Discuss with them the following skills which are relevant to this task.

READING

- Applying word analysis techniques
- Using content area vocabulary

SCIENCE

- Investigating and applying principles of anatomy and physiology

- Refer to Instructional Supplement for Activity Sheet 1.

ACTIVITY SHEET 6

USE MEDICAL TERMINOLOGY

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

PRACTICE TRANSCRIBING ABBREVIATIONS INTO MEDICAL TERMS AND TERMS INTO ABBREVIATIONS

NAME ______________________________

Part 1

Determine what the doctor is ordering by translating the underline abbreviation. Write the translation in the blank.

1. TPR every hour ______________________________
2. OOB tomorrow ______________________________
3. Cl. liq. diet as tol ______________________________
4. △ DSD ______________________________
5. Elevate HOB ______________________________
6. DC HWP ______________________________
7. BRP when awake ______________________________
8. Urine to lab ______________________________
9. VS once each shift ______________________________
10. NPO after midnight ______________________________
11. FF $\bar{c}$ meals ______________________________

Part 2

Help the nurse abbreviate the underlined words. Write the abbreviation in the blank.

1. 1000 cubic centimeter tap water enema given __________

   —Tolerated well __________

2. Refuses medicine by mouth __________

3. Up to bedside commode for __________

   bowel movement __________

4. Oxygen __________

   at 3 liters per minute __________

5. Encouraged to turn, cough, deep breathe __________

6. Axillary temperature 101° __________

7. Ambulated without difficulty __________

8. 500 cc normal saline __________

   infusing at keep vein open rate __________

Part 3

Determine what the doctor is ordering. Write the translation in the blank.

1. Give pre-op med stat ______________________________

2. Record ht. and wt. ______________________________

3. ↑ right arm ______________________________

4. Give aspirin gr. ten for temp. ↑ 101 ° F. ______________

   ____

5. Call doctor for pulse ≤ 50 ______________________________

6. Pain medication PRN ______________________________

7. Give medication t.i.d. p.c. ______________________________

8. Cont. IV's post-op ______________________________

9. Give medication q 6 h ______________________________

Part 4

Help the nurse abbreviate the underlined words. Write the abbreviation in the blank.

1. Small amount purulent drainage present ________
2. 18 French Foley catheter inserted ________
3. Turned every hour ________
4. Requesting sleeping medication for hour of sleep ________
5. Up in chair times (for) 30 minutes ________
6. Vomited approximately 100 cubic centimeters ________

   after eating ________
7. Taking water as desired ________
8. Voided quantity sufficient ________
9. States she slept poorly during night ________

Part 5

Determine what the doctor is ordering by translating the following abbreviations. Write the translation in the blank.

1. CCUA to lab for C & S ______________________________
2. CBC with diff ______________________________
3. Collect stool for BOP ______________________________

4. Repeat H & H ______________________________

5. Order ECG and EMG ______________________________

Part 6

Help the nurse abbreviate the underlined words. Write the abbreviation in the blank.

1. Complaining of pain in right lower quadrant ________
2. Finger stick blood sugar obtained ________
3. To X-ray for upper gastrointestinal series ________
4. Drops placed in both eyes ________
5. Abdomen distended ________
6. Right and left arms in casts ________

USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 6

- Introduce the assignment to the students by discussing why reading and science skills are important.

- Discuss with them the following skills which are relevant to this task.

  READING

  — Applying word analysis techniques
  — Using content area vocabulary

  SCIENCE

  — Investigating and applying principles of anatomy and physiology

- Review the reasons for using abbreviations.

- Review the importance of accuracy in the use of abbreviations.

- Stress the importance of memorization in using abbreviations.

- Use repetitive drills to help students memorize abbreviations.

- Discuss the fact that a single letter does not stand for the same concept in every abbreviation. It is a specific combination of letters that stands for the concept.

EXAMPLE:
URI Upper respiratory infection
UTI Urinary tract infection
MRI Magnetic resonance imaging

The "U's" in URI and UTI have different meanings.
The "I's" in UTI and MRI have different meanings.

- Instruct students in the use of various techniques to help them learn and remember standard abbreviations.
  - Association — Connecting a new term to something you already know

    EXAMPLE: H_2O for water

  - Categorization — Placing items into subject areas

    EXAMPLE: Terms or abbreviations that have to do with time: *p̄, q̄, stat*

  - Visualization — Making a mental picture

    EXAMPLE: GB — *G*reat *B*ig *G*all *B*ladder

  - Acronyms or sentences — Using the first letter of the word to make another word or a sentence.

    NOTE: Many abbreviations are acronyms. Other abbreviations are formed by using several of the letters in a word.

    EXAMPLE: "The AMA says that is AMA": The American Medical Association says that is "against medical advice."

- Connect the medical terms to the students' studies in anatomy and physiology.

ACTIVITY SHEET 7

USE MEDICAL TERMINOLOGY

BUILDING MEDICAL TERMS

NAME ______________________________

DIRECTIONS

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Build a medical term that means:

1. Excision of a breast ______________________________
2. View of the rectum ______________________________
3. Incision into a vein ______________________________
4. Creation of a permanent opening into the trachea

   ____
5. Surgical puncture of the chest ______________________________
6. Repair of a hernia ______________________________
7. Hardening of the arteries ______________________________
8. Plastic repair of the nose ______________________________
9. A view of the esophagus ______________________________
10. The study of life ______________________________

USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 7

- Introduce the assignment to the students by discussing why reading and science skills are important.

- Discuss with them the following skills which are relevant to this task.

  READING

  - Applying word analysis techniques
  - Using content area vocabulary

  SCIENCE

  - Investigating and applying principles of anatomy and physiology

- Refer to Instructional Supplement for Activity Sheet 1.

ACTIVITY ANSWERS

USE MEDICAL TERMINOLOGY

I

ACTIVITY SHEET 1

Part 1	Part 2
1. c	1. Eye
2. e	2. Tongue
3. d	3. Cheek
4. a	4. Seeing
5. f	5. Hearing
6. b	6. Foot
	7. Arm
	8. Breast
	9. Ribs
	10. Abdomen
	11. Breast
	12. Chest
	13. Hand
	14. Uterus
	15. Bladder
	16. Ureter
	17. Ovary
	18. Ovary
	19. Gallbladder
	20. Kidney

ACTIVITY SHEET 2

Part 1	Part 2	Part 3
1. e	1. i	1. trans
2. f	2. e	2. bi
3. h	3. a	3. cyan
4. c	4. h	4. brady
5. i	5. f	5. sinistr
6. d	6. g	
7. b	7. c	
8. j	8. j	
9. a	9. b	
10. g	10. d	

ACTIVITY SHEET 3

Part 1

1. iasis
2. itis
3. megaly
4. pathy
5. ptosis
6. rrhexis
7. dynia
8. algia
9. plasty
10. oid
11. rrhea
12. spasm
13. osis
14. malacia
15. cele

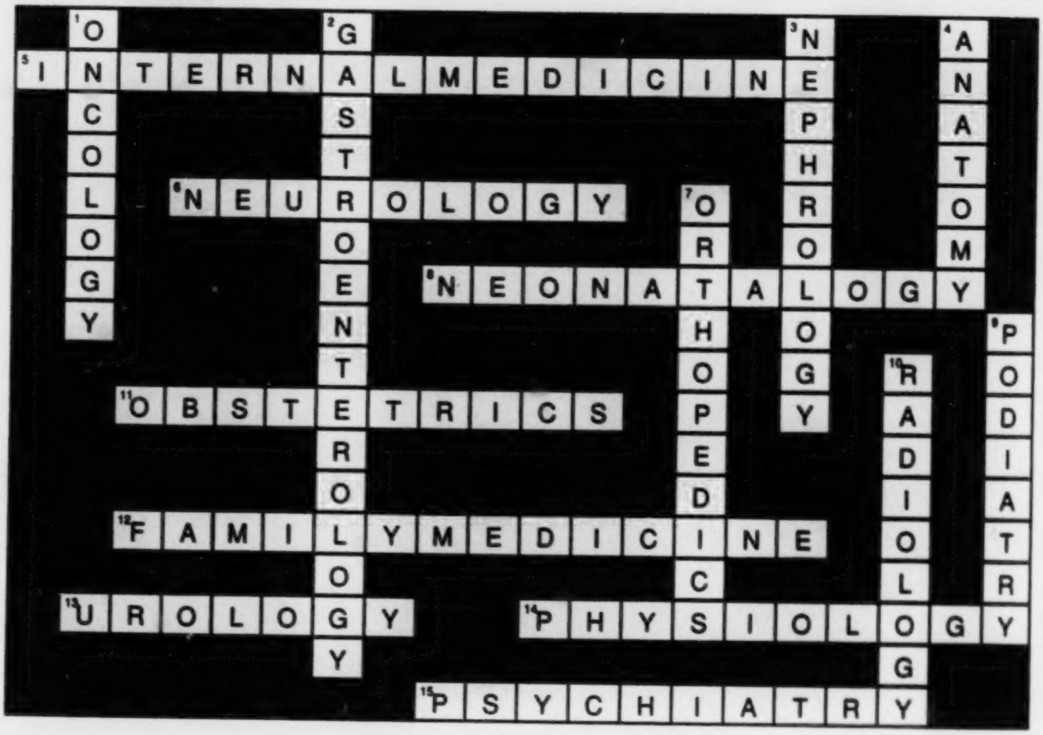
Part 2

1. c
2. i
3. g
4. f
5. a
6. e
7. j
8. b
9. d
10. h

ACTIVITY SHEET 4

1. Family Practitioner
2. Psychologist
3. Psychiatrist
4. Anesthesiologist
5. Anesthetist
6. Internist
7. Obstetrician
8. Pediatrician
9. Gerontologist
10. Pathologist
11. Trauma medicine
12. Oncologist
13. Plastic surgeon
14. Gastroenterologist
15. Orthopedist

ACTIVITY SHEET 5


1 ONCOLOGY
2 GASTROENTEROLOGY
3 NEPHROLOGY
4 ANATOMY
5 INTERNAL MEDICINE
6 NEUROLOGY
7 ORTHOPEDIC
8 NEONATALOGY
9 PODIATRY
10 RADIOLOGY
11 OBSTETRICS
12 FAMILY MEDICINE
13 UROLOGY
14 PHYSIOLOGY
15 PSYCHIATRY

ACTIVITY SHEET 6

Part 1

1. temperature, pulse, respiration
2. out of bed
3. clear liquid
4. change; dry sterile dressing
5. head of bed
6. discontinue; hot wet packs
7. bathroom privileges
8. laboratory
9. vital signs
10. nothing by mouth
11. force fluids; with

Part 2

1. TWE; tol.
2. med.; p.o.
3. BSC; BM
4. O_2; L
5. T, C, DB
6. Ax; temp.
7. Amb. $\bar{s}$
8. NS; KVO

Part 3

1. before surgery; medication; immediately
2. height; weight
3. elevate
4. grain; above; degree; Fahrenheit
5. less than
6. as needed (required)
7. three times a day; after meals
8. continue; after surgery
9. every six hours

Part 4

1. Sm. amt.
2. Fr.
3. qh
4. HS
5. x; min.
6. approx.; cc; $\bar{p}$
7. ad lib
8. q.s.
9. noc.

Part 5

1. clean catch urinalysis; culture and sensitivity
2. complete blood count; differential
3. blood, ova, and parasites
4. hemoglobin and hematocrit
5. electrocardiogram; electromyogram

Part 6

1. RLQ
2. FSBS
3. UGI
4. o.u.
5. abd.
6. R, Rt.,Ⓡ L, Lt,Ⓛ

ACTIVITY SHEET 7

1. Mastectomy
2. Proctoscopy
3. Phlebotomy
4. Tracheostomy
5. Thoracocentesis
6. Herniorrhaphy
7. Arteriosclerosis
8. Rhinoplasty
9. Esophagoscopy
10. Biology

ASSIGNMENT SHEET 1

USE MEDICAL TERMINOLOGY

I

NAME ______________________________ SCORE ________

OBJECTIVE 7

Analyze medical terms.

INTRODUCTION

There are hundreds of medical terms used everyday in health care facilities. To memorize all of the terms would be the same as learning a foreign language. it is much easier to learn roots, prefixes and suffixes and then analyze medical terms to determine their meanings.

DIRECTIONS

Reading Comprehension Skills
- Apply word analysis techniques

Functional Reading Skills
- Use content area vocabulary

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Part 1

Analyze the following medical terms to determine their meanings. Write an explanation of each term.

1. Xanthoderma
2. Arthrocentesis
3. Amenorrhea
4. Urethrocele
5. Orchiectomy
6. Hepatology
7. Encephalomyelogram

8. Hyperglycemia ____

____

9. Ophthalmoplegia ____

____

10. Megalogastria ____

____

DIRECTIONS

Part 2

Write the correct letter or letters in the blank.

____1. An otorhinolaryngologist would probably see patients with ______.

a. otitis media
b. diarrhea
c. salpingitis
d. gastralgia

____2. Which of the following sets of prefixes are arranged numerically from least to greatest?

a. bi, di, mono, uni
b. uni, bi, tri, quadr
c. tri, primi, quadr
d. di, mon, nulli

____3. Which of the following are correct color groupings?

a. White - chlor and xanth
b. Red - erythr and cyan
c. White - leuk, yellow - cirrh
d. Blue - melan, white - alb

____4. Which of the following patients going to surgery would return with a permanent opening onto a body part?

a. Mr. Herbert - arthrodesis
b. Ms. Jones - laparotomy
c. Ms. Lewis - gastrostomy
d. Mr. Hancock - orchiectomy

____5. A patient has been admitted with a diagnosis of ileitis. What body part is affected?

a. Hip
b. Small intestine
c. Large intestine
d. Stomach

BASIC SKILLS

USE MEDICAL TERMINOLOGY

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

- Introduce the assignment to the students by discussing why reading and science skills are important.

- Discuss with them the following skills which are relevant to this task.

  READING

  — Applying word analysis techniques
  — Using content area vocabulary

  SCIENCE

  — Investigating and applying principles of anatomy and physiology

- Refer to Instructional Supplement for Activity Sheets 1, 2, 3, 4, and 6.

USE MEDICAL TERMINOLOGY

ASSIGNMENT SHEET 1

Part 1

1. Yellow skin
2. Puncture of a joint
3. Absence of menstrual flow
4. Hernia of the urethra
5. Removal of the testes
6. Study of the liver
7. Record of the brain and spinal cord
8. Excessive sugar in the blood
9. Paralysis of the eye
10. Enlarged stomach

Part 2

1. a
2. b
3. c
4. c
5. b

WRITTEN TEST

USE MEDICAL TERMINOLOGY

I

NAME ______________________ SCORE ________

OBJECTIVE 1

Match medical roots referring to the body or its function to the English term. Write the letter of the correct term in the blank.

Part 1

____1. vas

____2. cephal

____3. aur

____4. dent

____5. pneum

____6. cardi

____7. lith

____8. myel

____9. psych

a. Spinal cord

b. Tooth

c. Stone

d. Eye

e. Blood vessel

f. Heart

g. Nose

h Skin

i. Head

j. Mind

k. Lung

l. Ear

m. Foot

n. Finger or toe

o. Skull

Part 2

____1. aesthe

____2. cyt

____3. enter

____4. glyc

____5. hem

____6. hyster

____7. nephr

____8. pnea

____9. ot

a. Blood

b. Bone

c. Breathing

d. Cell

e. Ear

f. Feeling

g. Female

h. Intestine

i. Joint

j. Kidney

k. Nerve

l. Skin

m. Sugar

n. Tooth

o. Uterus

Part 3

____1. arthr
____2. derm(at)
____3. gyne
____4. hepat
____5. mast
____6. neur
____7. ped(i)
____8. ost(e)

a. Blood
b. Bone
c. Breast
d. Breathing
e. Ear
f. Feeling
g. Female
h. Foot
i. Heart
j. Joint
k. Liver
l. Lung
m. Nerve
n. Skin
o. Uterus

OBJECTIVE 2

Match medical prefixes to their correct definitions. Write the letter of the correct answer in the blank. Answers can be used more than once.

Part 1

____1. a

____2. sub

____3. trans

____4. macro

____5. dextr

____6. erythr

____7. ante

____8. brady

____9. epi

____10. poly

____11. intra

____12. dys

____13. bi

____14. ab

____15. peri

a. Above

b. Across

c. Around

d. Away from

e. Before

f. Beneath

g. Between

h. Beyond

i. Blue

j. Fast

k. Large

l. Left

m. Many

n. One

o. Painful

p. Red

q. Right

r. Slow

s. Three

t. Two

u. Within

v. Without

Part 2

____1. circum

____2. inter

____3. mega

____4. mono

____5. pre

____6. cyan

____7. dia

____8. extra

____9. hyper

____10. mes

____11. semi

a. Across
b. Around
c. Before
d. Between
e. Beyond
f. Blue
g. Excessive
h. Half
i. Large
j. Middle
k. Not
l. One
m. Red
n. Within

OBJECTIVE 3

Match medical suffixes to their correct meanings. Write the letter of the correct answer in the blank.

Part 1

____1. phobia

____2. lysis

____3. centesis

____4. trophy

____5. rrhexis

____6. sclerosis

____7. penia

____8. meter

a. Breathing

b. Decrease in blood cells

c. Development, nourishment, growth

d. Disease

e. Falling, dropping

f. Fear

g. Hardening

h. Increase in blood cells

i. Loosen, destruction

j. Measure

k. Paralysis

l. Rupture

m. Small

n. Softening

o. Surgical puncture

p. Suture, repair

Part 2

____ 1. al

____ 2. algia

____ 3. ectomy

____ 4. emia

____ 5. gram

____ 6. ist

____ 7. itis

____ 8. osis

a. Blood

b. Condition

c. Disease

d. Hardening

e. Infection

f. Inflammation

g. One who specializes in

h. Pain

i. Pertaining to

j. Record

k. Reduction

l. Removal

Part 3

____1. otomy

____2. pathy

____3. plasty

____4. ptosis

____5. rrhage

____6. scope

____7. iasis

a. Bleeding

b. Burst forth

c. State of

d. Disease

e. Falling

f. Hardening

g. Incision

h. Instrument for looking

i. Pain

j. Reduction

k. Removal

l. Restoration

m. Suspension

OBJECTIVE 4 **Divide medical terms to determine their correct definitions.**

Part 1

Divide the following words to determine their meanings, then answer the questions by writing the letter of the correct answer in the blank.

____1. If blood is drawn from a vein, what is the procedure?

a. Vasoconstrictor
b. Phlebitis
c. Phlebotomy
d. Arteriogram

____2. Four patients are going to surgery. Which one is going to have a body part removed?

a. Ms. Smith; laparoscopy
b. Mr. Carson; lithotripsy
c. Mr. Miles; rhinoplasty
d. Ms. James; mastectomy

____3. Which of the following diagnoses involves the muscle of the heart?

a. Renal calculus
b. Myeloma
c. Osteomalacia
d. Myocarditis

____4. If you needed a doctor to consult about a kidney problem, which one would you choose?

a. Endocrinologist
b. Gynecologist
c. Nephrologist
d. Gastroenterologist

____5. Ms. Ames has found she must have surgery for gall stones. Which procedure would you expect her to have done?

a. Colectomy
b. Cystoscopy
c. Gastrectomy
d. Cholecystectomy

Part 2

Divide the following words and write their meanings in the blanks.

1. hysterectomy ____

____

2. colonoscopy ____

____

3. arteriogram ____

____

4. otoscope ____

____

5. carcinogen ____

____

6. mastalgia ____

____

7. colostomy ____

____

8. glucosuria ____

____

9. gastritis ______________________________

____

10. cytology ______________________________

____

11. hemiplegia ______________________________

____

12. hyperglycemia ______________________________

____

13. rhinorrhea ______________________________

____

14. encephalogram ______________________________

____

15. hematuria ______________________________

____

16. hepatomegaly ______________________________

____

Part 3

Write the meaning of each word in the blank.

1. anuria ____
2. blepharospasm ____________________________________
3. craniotomy ____
4. cystoscopy ____
5. dyspnea ____
6. gastrectomy _______________________________________
7. lithotripsy ____
8. microrhinia _______________________________________
9. neuralgia ____
10. tachycardia ______________________________________

OBJECTIVE 5 **Match health care specialties to their correct definitions.** Write the letter before the correct answer in the blank.

Part 1

____1. Treatment of diseases of the female reproductive system

____2. Treatment of disorders of the ear, nose, and throat

____3. Diagnosis and treatment of disease using X-ray and similar means

____4. Study and treatment of diseases of the kidney

____5. Concerned with the care of patients between puberty and the completion of growth

____6. The study of heredity and inherited conditions

____7. The study of the functions of the body

____8. Diagnosis and treatment of victims of accidents and acute illness

____9. Diagnosis and treatment of disorders of the bones, muscles and joints

____10. Concerned with diagnosis and treatment of the internal organs (especially non-surgical treatment)

a. Adolescent medicine

b. Anatomy

c. Cardiology

d. Chiropractic

e. Gastroenterology

f. Genetics

g. Gynecology

h. Industrial medicine

i. Internal medicine

j. Nephrology

k. Orthodontics

l. Orthopedics

m. Otorhino-laryngology

n. Pathology

o. Physiology

p. Podiatry

q. Psychiatry

r. Radiology

s. Thoracic surgery

t. Trauma medicine

Part 2

____1. Concerned with conditions associated with age

____2. Study of skin disorders

____3. Diagnosis and treatment of conditions of the eye by a medical doctor

____4. Concerned with diseases of the urinary system

____5. Concerned with the care of the pregnant woman

____6. Study of the structure of the body

____7. Treats conditions of the mouth and gums

____8. Provides surgical treatment of the structures of the nervous system

____9. Concerned with diagnosing and treating heart problems

____10. Study of mental and emotional disorders

a. Anatomy
b. Cardiology
c. Dentistry
d. Dermatology
e. Endocrinology
f. Epidemiology
g. Gerontology
h. Hematology
i. Neurology
j. Neurosurgery
k. Obstetrics
l. Oncology
m. Opthamology
n. Optometry
o. Orthopedics
p. Pediatrics
q. Physiology
r. Psychology
s. Radiology
t. Urology

OBJECTIVE 6

Translate medical abbreviations into terms and terms into abbreviations. Write the appropriate information in the blanks.

Part 1

Doctor's orders: Write the correct medical terms for the underlined abbreviations in the blanks.

1. NPO p̄ MN
2. Call for R > 30
3. H & H when blood infused
4. W/C b.i.d.
5. Get FSBS 2 hr. p.c.
6. H_2O ad lib
7. Penicillin IM q.i.d.
8. VS q̄ shift
9. HWP to lower back
10. DC IV post-op
11. Give Vistaril c̄ Demerol
12. DAT in A.M.
13. Hold all meds

Part 2

Chart abbreviations: Write the abbreviations for the underlines terms in the blanks.

1. To physical therapy by wheelchair
2. 750 milliliter tap water enema given
3. Ambulatory

4. Aspirin grains ten given by mouth for elevated temperature

____

5. Keep vein open device intact in left wrist ______________

6. Complains of pain in left upper quadrant ______________

7. Urinalysis to lab immediately ______________

8. 18 French nasogastric tube inserted without difficulty

____

9. Large amount soft brown stool expelled ______________

10. Catheterized urine sent for culture and sensitivity

____

11. Taking clear liquid diet well______________

12. Drops ii placed in right eye ______________

Part 3

Write the meanings for the following abbreviations in the blanks.

1. BRP ______________
2. HOB______________
3. E ______________
4. sm______________
5. R ______________
6. CNS______________
7. o.u. ______________
8. PRN ______________
9. q3h ______________

10. RLQ ____

11. T,C,DB ______________________________________

NOTICE The following assignment sheet is not part of the written test. If it has not been completed, check with your instructor.

OBJECTIVE 7 **Analyze medical terms.** SCORE ___

WRITTEN TEST ANSWERS

USE MEDICAL TERMINOLOGY

I

OBJECTIVE 1

Part 1

1. e
2. i
3. l
4. b
5. k
6. f
7. c
8. a
9. j

Part 2

1. f
2. d
3. h
4. m
5. a
6. o
7. j
8. c
9. e

Part 3

1. j
2. n
3. g
4. k
5. c
6. m
7. h
8. b

OBJECTIVE 2

Part 1

1. v
2. f
3. b
4. k
5. q
6. p
7. e
8. r
9. a
10. m
11. u
12. o
13. t
14. d
15. c

Part 2

1. b
2. d
3. i
4. l
5. c
6. f
7. a
8. e
9. g
10. j
11. h

OBJECTIVE 3

Part 1

1. f
2. i
3. o
4. c
5. l
6. g
7. b
8. j

Part 2

1. i
2. h
3. l
4. a
5. j
6. g
7. f
8. b

Part 3

1. g
2. d
3. l
4. e
5. b
6. h
7. c

OBJECTIVE 4

Part 1

1. c
2. d
3. d
4. c
5. d

Part 2

1. Removal of uterus
2. View of large intestine
3. Record of artery
4. Instrument for viewing ear
5. Origin, production of cancer
6. breast pain
7. permanent opening into the large intestine
8. sugar in the urine
9. inflammation of the stomach
10. study of cells
11. paralysis of half (of the body)
12. excessive sugar in the blood
13. flow from the nose
14. record of the brain
15. blood in the urine
16. enlarged liver

Part 3

1. without urine
2. spasm (twitching) of eyelid
3. incision into skull
4. view of bladder
5. difficult breathing
6. removal of stomach
7. crushing of stone
8. small nose
9. nerve pain
10. fast heart (rate)

OBJECTIVE 5

Part 1

1. g
2. m
3. r
4. j
5. a
6. f
7. o
8. t
9. l
10. i

Part 2

1. g
2. d
3. m
4. t
5. k
6. a
7. c
8. j
9. b
10. r

OBJECTIVE 6

Part 1

1. Nothing by mouth after midnight
2. respirations greater than
3. hemoglobin and hematocrit
4. wheelchair twice a day
5. fingerstick blood sugar hours after meals
6. water as desired
7. intramuscularly four times a day
8. vital signs every
9. hot wet packs
10. discontinue intravenous after surgery
11. with
12. diet as tolerated morning
13. medications

Part 2

1. via or per w/c
2. ml TWE
3. amb
4. gr. p.o. ↑ temp
5. KVO L, Lt. or Ⓛ
6. c/o LUQ
7. UA stat
8. Fr. N/G $\bar{s}$
9. Lg. amt.
10. Cath C&S
11. cl. liq.
12. gtt. o.d.

Part 3

1. bathroom privileges
2. head of bed
3. enema
4. small
5. Right
6. central nervous system
7. both eyes
8. as needed
9. every 3 hours
10. right lower quadrant
11. turn, cough, deep breathe

OBJECTIVE 7 Refer to answers to Assignment Sheet 1.

OBJECTIVE SHEET

PRACTICE SAFETY PROCEDURES

II

INTRODUCTION

We expect to be safe. As we work, study, play, and engage in all of life's activities, we are expecting to remain safe and unharmed. Yet, there are hazards in any environment. The health care field offers it's own unique set of hazards. Students in the health care field need to know accident prevention measures to protect themselves, their co-workers, and of course, their patients.

Being aware of possible hazards is the first step in accident prevention. Practicing preventative measures is the second step. When the unexpected does occur, it is essential to know the right steps to take to alleviate or prevent further injury.

UNIT OBJECTIVE

After completing this unit, the student should be able to evaluate safety conditions and demonstrate safe practices for self and patients. The student will show these competencies by completing assignment sheets, job sheets, and the written test with a minimum of 100 percent accuracy.

SPECIFIC OBJECTIVES

After completing this unit. the student will be able to

1. Match terms associated with safety practices and procedures to their correct definitions.
2. Select true statements about the advantages of practicing good body mechanics.
3. List components of a safe school and work environment.
4. Select effective procedures to follow in the classroom or clinical area in case of fire or tornado.
5. Select appropriate actions to take in case of a bomb threat.
6. Select the best word or phrase to complete statements about hazardous materials.
7. Discuss the proper use of equipment and materials for handling hazardous wastes.
8. Select from a list appropriate actions to take to ensure the patient's safety.

9. Arrange in order the steps for handling an incident or error involving self or others.

10. Maintain a safe school and working environment. (Assignment Sheet 1)

11. Use proper handling and disposal techniques for hazardous materials. (Assignment Sheet 2)

12. Document an incident on the appropriate form. (Assignment Sheet 3)

13. Demonstrate the ability to

    a. Participate in a fire/tornado/bomb threat evacuation drill. (Job Sheet 1)

    b. Use proper body mechanics. (Job Sheet 2)

    c. Complete requirements for CPR and First Aid course. (Job Sheet 3)

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PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration:
  - Assist student to conduct a chapter service project on safety.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules. Display in highly visible areas.
  - Plan community or school health project that involves disseminating pamphlets about safety.
  - Share guidelines for Oklahoma HOSA Safety competition.

DELIVERY

Discuss unit objectives

Objective 1

- Discuss terms associated with safety practices and procedures.
- Have a spelling bee to help students learn terms.

Objective 2

- Demonstrate good and poor body mechanics and let the students evaluate your posture and movements.
- Have someone who has experienced a herniated intervertebral disc talk to the students

Objective 3

- Evaluate the school environment and the working environments of employed students.
- Go on a campus inspection tour to find good and poor examples of environmental safety.
- Use Supplement 5 to discuss accident prevention. Ask students to add to the list.
- Have students brainstorm safety measures to add to Supplement 5.

Objective 4

- Explain classroom fire drill procedures.
- Locate fire extinguishers on campus and discuss for what types of fires they would be effective.
- Arrange for the local fire department to give a demonstration of fire extinguishers.
- Have students plan evacuation routes and alternate routes for their homes.
- Share hospital and nursing home code designations and evacuation routes with the students.
- Point out the designated tornado shelter for the classroom.
- Invite a meteorologist to talk to the class about tornado safety.

Objective 5

- Share school and clinical area guidelines for bomb threats.

- Role play a telephoned bomb threat. Devise various background sounds and voice qualities.
- Using Supplement 2, have students role play the procedure to follow for a telephoned bomb threat.

Objective 6

- Show students chemical information lists and MSDS's for various classes at school.
- Gather various products and read labels.
- Discuss Supplement 3, suggesting various hazardous materials for students to classify.

Objective 7

- Show students a sharps container.
- Show gowns, masks, gloves, and goggles.

Objective 8

- Find pictures of various patient situations and discuss the implications for safety.
- Share the guidelines for the HOSA safety competition.
- Discuss each safety precaution listed in Supplement 4, emphasizing its importance.

Objective 9

- Show students the incident reports used at clinical facilities where they will be.
- Discuss types of events requiring an incident report.
- Show a school accident report.
- Divide the students into groups. Have them make up an imaginary incident with injury. Use the form in Supplement 5 to record the facts about the incident.

APPLICATION

Objective 10

- Show video, *Safety: The Hospital's Program...Everyone's Responsibility*.
- Show the 3 videos that are packaged with the curriculum guide. Discuss Assignment Sheet 1 before showing videos.
- Use Assignment Sheet 1 to give students practice identifying safe working conditions.

Objective 11

- Use Assignment Sheet 2 to give students practice handling and disposing of hazardous wastes.

Objective 12

- Provide students with copies of an incident report.
- Use Assignment Sheet 3 to give students practice documenting incidents.

Objective 13a

- Arrange for students to participate in a fire/tornado/bomb threat drill.
- Have students complete Job Sheet 1.

Objective 13b

- Have students complete Job Sheet 2.
- Have students evaluate one another.

Objective 13c

- Make arrangements for students to complete first-aid and CPR courses.

  NOTE: The American Heart Association, The American Red Cross, local fire departments and local ambulance services may assist you in providing this training.

- Have students complete Job Sheet 3.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities and job sheets if not previously completed.
- Reteach and retest if necessary.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Safety: The Hospital's Program...Everyone's Responsibility*, Medcom Inc., P.O. Box 116, Garden Grove, California 92642.

Computer Software

- *The Fire Bug*. Computerized Educational Systems, 307 Park Lake Circle, P.O. Box 536905, Orlando, Florida 32853-6905.
- *Body Mechanics*. Computerized Educational Systems, 307 Park Lake Circle, P.O. Box 536905, Oriando, Florida 32853-6905.
- *Crossword Magic*. L & S Computerware, Mindscape, Inc., 3444 Dundee Road, North Brook, Illinois.

Publications

- *MSDS Pocket Dictionary*. Available from Global Occupational Safety, 7109 Hemlock Drive, Hempstead, NY 11550-6620. Phone 1-0800-433-4848.
- MSDS Employee Information and Training Poster. Available from Global Occupational Safety, 7109 Hemlock Drive, Hempstead, NY 11550-6620. Phone 1-800-433-4848.
- Hazardous Material Wall Chart. Available from Global Occupational Safety, 7109 Hemlock Drive, Hempstead, NY 11550-6620. Phone 1-0800-433-4848.

UNIT REFERENCES

- England, Gary. *Those Terrible Twisters and the Weather of Oklahoma*, 1987.
- Hegner, Barbara and Esther Caldwell. *Assisting in Long-Term Care*. Delmar Publishers, Inc., Albany, New York, 1988.
- Hogan, Jean and Sheila A. Sorrentino. *Textbook for Long-Term Care Assistants*. The C.V. Mosby Company, St. Louis, Missouri, 1988.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing: Concepts and Procedures*, (3rd ed.). Addison-Wesley Publishing Company, Inc., Menlo Park, California, 1987.
- Lewis, LuVerne Wolff And Barbara Kuhn Timby. *Fundamental Skills and Concepts in Patient Care*. J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.

- McCann, Vivian, Nikki Hibdon and Maxine Oliver. *Safety Manual*. Kiomichi AVTS District No. 7, Talihina, Oklahoma, August, 1987.

- Piper, James and John Piverotto. "Handling Hazardous Materials". *Vocational Education Journal*, March 1990, p. 18-19.

- *Safety on the Job*. Curriculum and Instructional Material Center, Oklahoma Department of Vocational-Technical Education, Stillwater, Oklahoma, 1989.

- Schniedman, Rose B. and Susan S. Lambert. *Being a Nursing Assistant* (4th ed.). The Hospital Research and Education Trust, Englewood Cliffs, New Jersey, 1986.

- Sundberg, Mary C. *Fundamentals of Nursing*. Jones and Bartlett Publishers, Inc., Monterey, California, 1986.

- Will, Connie A. and Judith B. Eighmy. *Being a Long-Term Nursing Assistant*, (2nd ed.). Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1988.

- "Working with Orthopedic Patients." *Nursing 82 Books*, Intermed Communications, Inc., Springhouse, Pennsylvania, 1982.

PRACTICE SAFETY PROCEDURES

The Employee Right-to-Know*

OSHA Hazard Communication Standard (29 CRF 1910.1200)

The law requires that chemical manufacturers and importers...

- Evaluate products and determine whether there are any health hazards associated with using them.
- Communicate their findings via labels and Material Safety Data Sheets for each product they manufacture.

The law requires that your employer...

- Establish a written Hazard Communication Program that explains exactly how he is going to inform you and your fellow workers about hazards and how to handle them. You should be able to see this program at any time.
- Label products appropriately.
- Obtain Material Safety Data Sheets (MSDS's) for all products with physical or health hazards. These documents should be kept in a place where you can easily refer to them.
- Train you to identify and deal with hazardous materials and make you aware of any new hazards introduced into your work area.

Before you start any job, YOU should...

- Read labels and MSDS documents.
- Identify any hazardous materials and get the proper equipment to work with them safely.
- Always use proper techniques to perform your tasks - and be familiar with emergency procedures.
- Ask your supervisor when you have any questions.

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Continues on the next page

Everyone — government, manufacturers, your employer — everyone wants you to be safe. That's why these laws were developed. But your safety is up to YOU. So take advantage of the law. Inform yourself, learn how to use chemical products safely, and be sure to exercise the little extra care that's called for.

OBJECTIVE 1

Match terms associated with safety practices and procedures to their correct definitions.

- **Accident report** — A written report made to record the circumstances surrounding an unexpected event and the actions taken after the event
- **Alignment** — The position of body parts in relation to one another
- **Asphyxiation** — Lack of oxygen in the body that might be caused by choking, strangulation, or drowning
- **Balance** — Ability to maintain position
- **Base of support** — Contact of an object against the surface on which it rests
- **Body Mechanics** — Use of the body to maintain balance and achieve motion
- **Center of gravity** — Area in the body where mass is centered
- **Chemical information list (CIL)** — A listing of all potentially hazardous chemicals found in the area
- **Contaminate** — To introduce a harmful substance
- **Disc** — A round structure composed of cartilage that lies between the vertebrae
- **Hazard Communication Standard** — Federal guidelines concerning employers' responsibility in informing workers of chemical hazards in the work place
- **Hazardous** — Capable of causing injury
- **Incident report** — A record completed after an unusual occurrence that describes what happened and the steps taken after the occurrence

- **Line of gravity** — An imaginary vertical line that passes through the center of gravity
- **Material Safety Data Sheet (MSDS)** — Detailed information about chemical products, supplied by the manufacturer
- **OSHA** — The Occupational Safety and Health Administration, a federal agency concerned with work place safety
- **Pathogenic organism** — A living thing capable of producing disease

  EXAMPLES: Bacteria, viruses, spores
- **Poison** — A substance that can have harmful effects including death
- **Posture** — Alignment and position of the body
- **Right to Know** — A term used to describe communication to employees concerning chemical hazards in the work place
- **Tornado** — Twisting column of high wind accompanied by a funnel shaped cloud
- **Vertebrae** — The 33 small bones making up the spinal column

OBJECTIVE 2

Select true statements about the advantages of practicing good body mechanics.

Body mechanics refers to the efficient use of our bodies as we move and work. Good body mechanics prevent injury and fatigue, increase efficiency, improve health and appearance, and set good examples for others to follow.

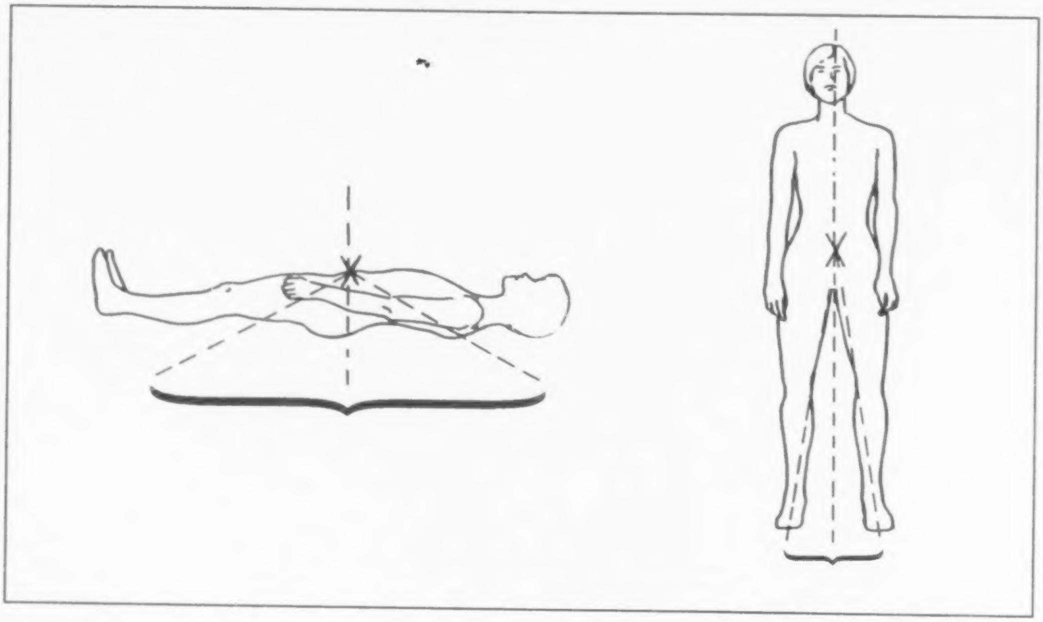
Knowing the basic principles of physics at work in body mechanics can help make your work easier and more efficient. We speak of the *base of support* as the area of the body that comes in contact with the surface upon which it rests. The *center of gravity* is the point in the body at which mass is centered. In humans, that point is usually in the pelvic area. The third important principle is the *line of gravity*, an imaginary vertical line that passes through the center of gravity.

We put all these together in a statement that describes the optimum for body mechanics.

Balance is more stable when the base of support is broad and the line of gravity passes through the center of gravity and near the middle of the base of support.

In addition, balance is more stable when the center of gravity is low.

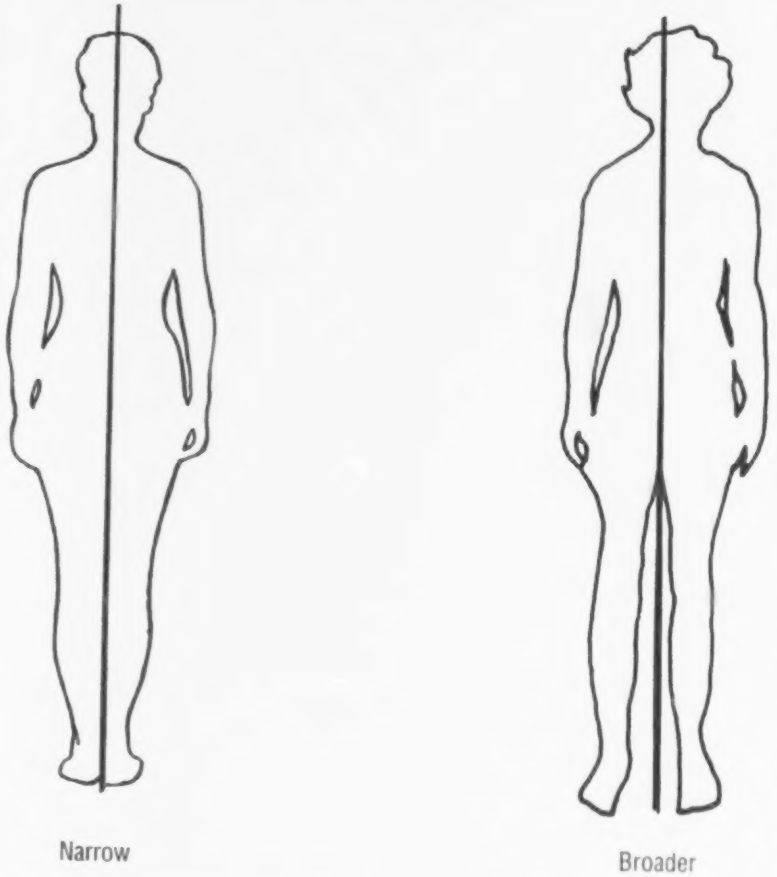
The figure below shows the effects that gravity and the base of support have on balance. Notice that stability is greater when the base of support is wider and the center of gravity is lower.



We can compare ourselves in different positions. When we lie down, much of our body surface or base of support is in contact with the bed. When we sit in a chair, there is still a considerable amount of body surface in contact with the seat of the chair, but less than when we lie down and the center of gravity is higher, increasing the possibility of losing balance. But when we stand, much less of our body contacts the surface. The base of support is narrowed and the center of gravity is much higher.

In the standing position we would be much more likely to fall. The center of gravity is higher and the base of support is narrower.

Base of Support

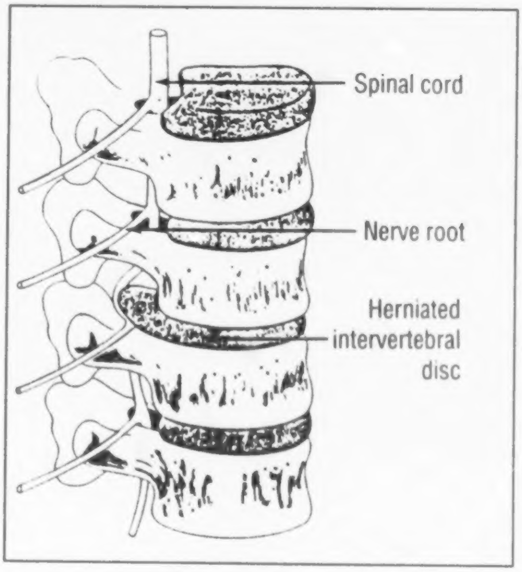


We can improve our chances for staying upright by the way we stand: with our weight evenly distributed and our feet slightly apart.

Good posture improves balance and lessens strain on body parts. If we try to stand on one foot, we can see a dramatic change in our ability to stay balanced. The base of support is significantly narrowed.

Not only does the way we stand affect our balance, but it can also affect our health. Many people suffer acute or chronic back pain. In many cases, poor body mechanics contributes to the problem.

The back is made up of a series of bones, the vertebrae. The vertebrae serve the very important function of surrounding and protecting the spinal cord, a major part of the nervous system. The spinal nerves branch off from the spinal cord through openings in the vertebrae.



Between these vertebrae are the discs that are cushions of cartilage. They serve as shock absorbers. The herniated intervertebral disc or "slipped disc" is often the source of back pain. Because of uneven distribution of pressure on a disc, it bulges out of place and puts pressure on one of the spinal nerves causing pain.

The way we sit, stand, and work will help protect our backs. Good posture also aids the functioning of other body systems. Lung expansion is encouraged when our posture is good. Pressure on blood vessels and nerves is prevented. Muscle tone is preserved. When posture is good, we also look better.

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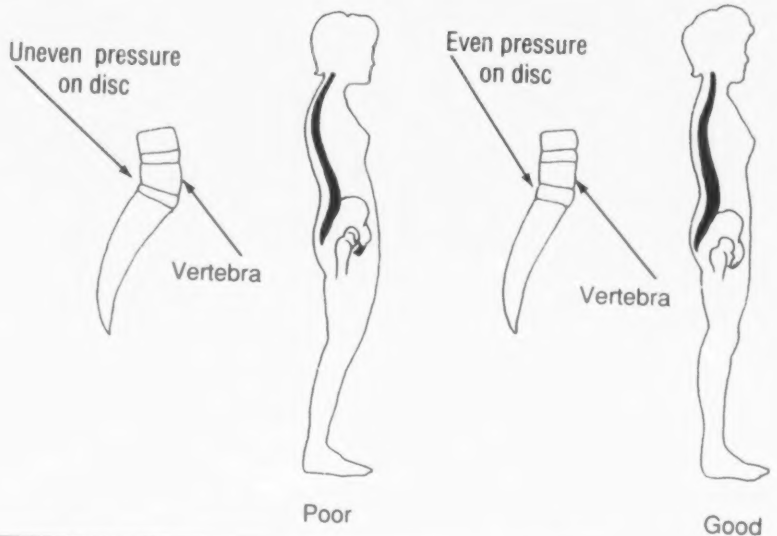
Posture: Standing



We have many muscle groups to aid us in moving and working. Some are larger and stronger than others. If we use these large muscles, we can prevent injury to ourselves. The muscles of the upper arms and the upper legs are large ones. These are the muscles we want to use in lifting and moving. Our back muscles are not very large or strong. We want to spare them. There are several ways to make sure we use the right muscle groups.

- Bend the knees and keep the back straight when stooping and lifting.
- Get as close to the work as possible to prevent reaching. In the clinical area, some of our equipment is designed to make this easier. Beds can be raised to a comfortable working level. Siderails can be lowered to get closer to the patient.
- Use ladders or stepstools to get closer to objects that are higher than we are.
- Carry objects close to the body.

We can preserve our backs further by using other good work habits.

- Avoid twisting with a load.
- Avoid sudden jerking movements when lifting.
- Slide, roll, or pivot an object to avoid lifting whenever possible.
- Use body weight to push or pull an object.
- Face the work to be done.
- Ask for help when the load is large.

Nurses can reinforce instructions by doctors and physical therapists concerning body mechanics. Many patients must re-learn work patterns to preserve body function and prevent pain. We can tell them what we know, but our most effective teaching tool will be the way we use our bodies in maintaining posture and working.

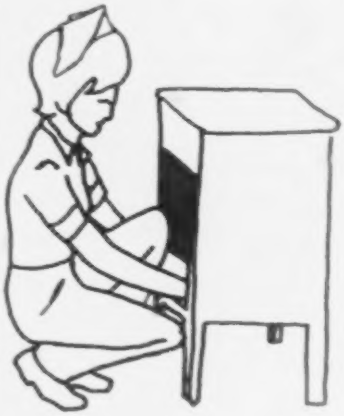
Our body mechanics are always on display. It is to our advantage to make the display a good one.

One little phrase will help to remember one of the most important concepts of body mechanics:

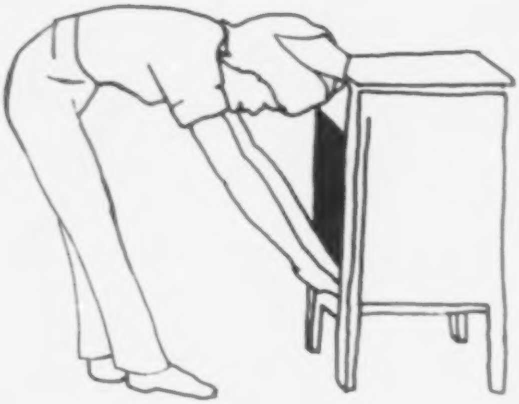
BEND YOUR KNEES; NOT YOUR BACK!

Alignment

Correct and Incorrect



Correct Alignment



Incorrect Alignment

OBJECTIVE 3

List components of a safe school and work environment.

At school and at work, we expect to have a safe environment. There are a number of conditions that should be met for our safety. We expect:

- Clean air without harmful fumes to breathe
- Adequate lighting to prevent eyestrain and allow us to perform our tasks adequately and safely
- Comfortable and safe noise level
- Seating that supports the natural curves of the body and encourages good body mechanics
- Adequate, clean restroom facilities
- Barrier free walkways in good repair
- Clearly marked exits
- Emergency exits unlocked and freely accessible
- Emergency evacuation routes posted
- Fire extinguishers readily available
- Hazardous materials clearly identified
- Adequate storage facilities for hazardous materials
- Protective gear available for use when necessary
- An effective alarm or notification system for emergency situations
- Safety rules posted
- Training in safety procedures

Increasingly, a safe environment is considered to be a smoke-free environment. This involves posting No Smoking signs and perhaps providing smoking areas with adequate receptacles for cigarettes. Even when smoking is permitted, there may be places where smoking is dangerous, such as areas where oxygen or other flammable gases are used or stored. These should be clearly identified.

In some work areas, eating and drinking could cause hazards and may therefore be banned. Spills can damage equipment and make it unsafe; possible inattention to safety while eating or drinking can cause accidents; or a person may ingest hazardous materials or fumes along with the food or drink.

A big part of safety is exercising concern and respect for others. Pushing, shoving, horseplay, leaving areas dirty or cluttered, or mishandling equipment could all lead to unsafe conditions for others. Every individual has the responsibility to help keep the environment safe for everyone.

Education and industry have a responsibility to students and employees to provide safe conditions. The student or employee then has the responsibility to become informed, use proper safety procedures, and report any problems observed.

OBJECTIVE 4

Select effective procedures to follow in the classroom or clinical area in case of fire or tornado.

Fire

A fire can be a devastating event. Knowing the correct steps to take when one occurs can prevent injury and save lives. Every school, hospital, or place of business needs a well-developed fire plan. It would be well for families to develop their own fire plan for use in their homes. All of us should know how to proceed in case of fire wherever we are.

Schools and hospitals should have evacuation routes posted in all areas. Motel and hotel rooms have them posted in each guest room. A part of orientation to school or place of employment should include steps to take in case of fire, including evacuation procedures and routes. Keep in mind that a primary evacuation route or exit may be blocked, so you must always be ready to use an alternate route or exit. Be alert to the posted evacuation plans in all public buildings.

Guidelines for evacuation

- Everyone should remain calm and move quickly without pushing, running, or unnecessary noise. This allows all to exit without injury and allows instructions to be given if necessary.
- Doors and windows should be closed. This limits the amount of oxygen the fire receives (a necessity for burning) and prevents the spread of smoke.
- Lights should be turned out, (as institutional policy dictates).
- Closed doors should be felt before being opened. A hot door indicates fire on the other side.
- If exit through doors is prohibited and victims must wait for rescue through windows, wet cloths or towels should be placed on the floor next to the doors to prevent the spread of smoke into the room.
- A wet towel over the head will help if victims must walk through smoke. Breathing through the cloth will help prevent smoke inhalation. *Do not enter thick smoke.*
- Crawling on the floor will help minimize smoke inhalation.
- Never use elevators during a fire. The construction of the elevator shaft makes it an easy route for the spread of fire.
- All persons must be accounted for. In a school, the instructor would probably call roll immediately after evacuation to assure that everyone has exited. In a hospital, the charge nurse would have a listing of all patients.

Fire drills

Fire drills are an important part of any institution's safety program. Schools, hospitals, nursing homes, and businesses practice evacuating the building to insure safe exit and orderly reporting in case of fire. Drills take time and interrupt routine, but they can save lives.

During a fire or fire drill, some type of code or signal may be used to alert employees or students that a potentially dangerous situation exists. In a school, it may be a pattern of bells or buzzers. In a health care institution, it may be a coded announcement on the public address system that will inform employees without alarming patients and visitors unnecessarily. Such phrases as "Condition Red" or "Dr. Red" may be used. The location would be included so that employees can take appropriate steps.

The acronym RACE is used to help health care workers remember the steps to take if fire occurs. It can be applied to a number of situations.

R — **Rescue** or **Remove** patients who are in immediate danger

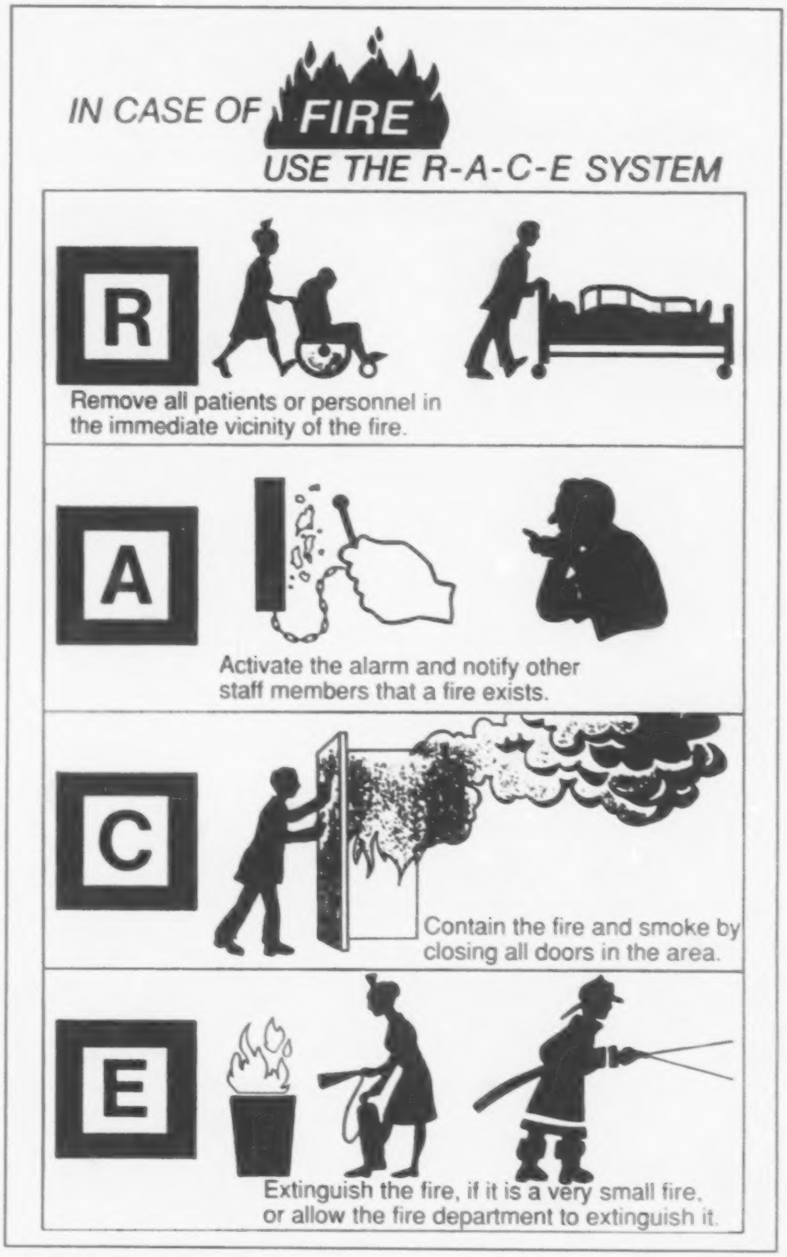
A — **Alarm** or **Alert** or **Activate** the alarm system

C — **Contain** the fire

E — **Extinguish** the fire

Each step deserves further explanation. Rescue or removing patients does not apply to all patients initially, but only those in *immediate* danger. Perhaps a more general evacuation will be necessary later, but other steps should be attended to first.

Activation of the alarm system is vitally important. A fire in a health care facility is no small matter and professional help in combatting it is needed quickly. Each facility will have a set procedure for notification. There may be a special number to call for immediate action or perhaps the operator will be notified. When reporting a fire, the exact location should be stated along with the type of fire if that information is known.



Remove all patients or personnel in the immediate vicinity of the fire.

Activate the alarm and notify other staff members that a fire exists.

Contain the fire and smoke by closing all doors in the area.

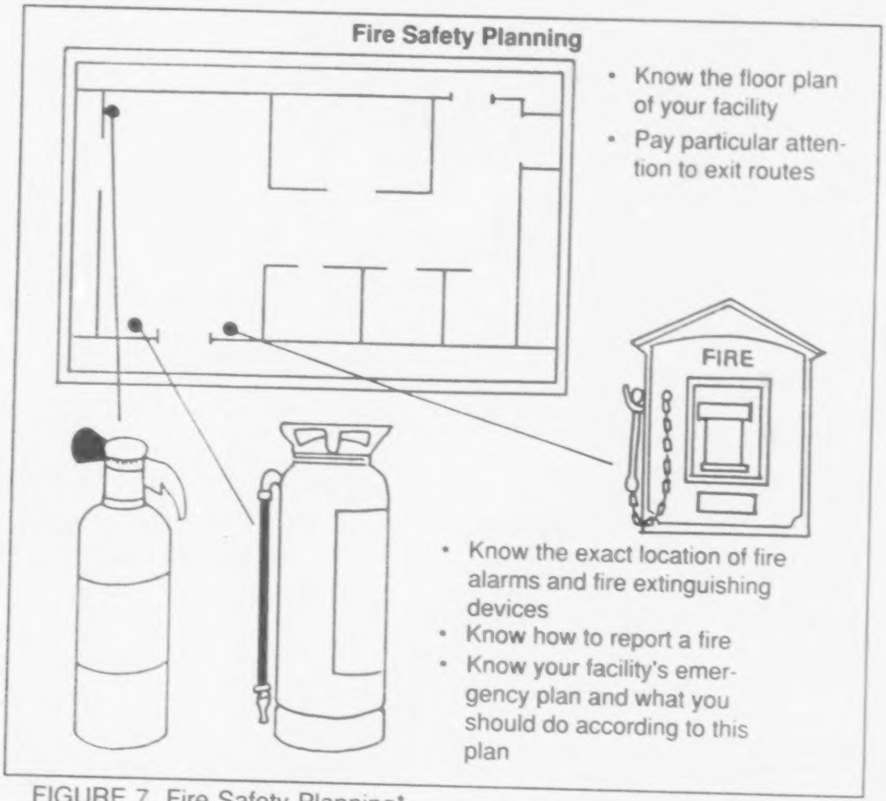
Extinguish the fire, if it is a very small fire, or allow the fire department to extinguish it.

FIGURE 6 R-A-C-E System*

*Rose B. Schniedman/Susan S. Lambert. *Being A Nursing Assistant.* 4e. ©1986. p75 Reprinted by permission of Prentice Hall, Englewood Cliffs, New Jersey

Usually, alarm boxes that activate the system are located throughout the facility. In a long term care facility, the nurse may be the one to place the call to the fire department.

Containing the fire means, first of all, closing all windows and doors. This is done to prevent the spread of fire. Oxygen supplies should also be turned off. Health care facilities with centrally located oxygen supplies will have cut-off valves that must be closed. This may mean that some patients will have to be ventilated manually.



Fire Safety Planning

- Know the floor plan of your facility
- Pay particular attention to exit routes

- Know the exact location of fire alarms and fire extinguishing devices
- Know how to report a fire
- Know your facility's emergency plan and what you should do according to this plan

FIGURE 7 Fire Safety Planning*

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*Connie A. Will/Judith B. Eighmy, BEING A LONG-TERM CARE NURSING ASSISTANT, 2e. ©1988, p. 33. Reprinted by permission of Prentice Hall, Englewood Cliffs, New Jersey

Using fire extinguishers

You should identify the location of fire extinguishers ahead of time. You should also know how to use a fire extinguisher ahead of time. Many types of fire extinguishers have locking pins that must be pulled before they can be activated. The nozzle of the extinguisher should be pointed at the *base* of the fire, not at the flames. After use, the extinguisher should not be returned to its storage area until it has been recharged. Placing the extinguisher on its side until it is recharged is a sign that it is not ready for use.

BASIC USE OF FIRE EXTINGUISHERS

Always follow the operating instructions found on the label of each extinguisher at your facility. The basic steps for using any extinguisher are similar but are not the same. You should become familiar with the proper use of each type of extinguisher that you may have to use in an emergency.

PPPS

1. **P — PULL** the pin at the top of the extinguisher that keeps the handle from being pressed. Break the plastic or thin wire inspection band.

   NOTE: Carry and operate the extinguisher in its *upright* position. Only obsolete soda-acid, foam, and cartridge operated water extinguishers are designed to be turned upside down.

2. **P — POINT** the nozzle or outlet *toward the fire.*

   NOTE: Some hose assemblies are clipped to the body of the extinguisher. Release the hose assembly, then point.

3. **P — PRESS** the handle above the carrying handle to discharge the contents inside.

   NOTE: You can release the handle to stop the discharge of contents inside.

4. **S — SWEEP** the nozzle back and forth at the *base* of the flames to spread the extinguishing agent.

   NOTE: After the fire is out, look for smoldering hot spots or reflash of flammable liquids. Be sure the fire is out.

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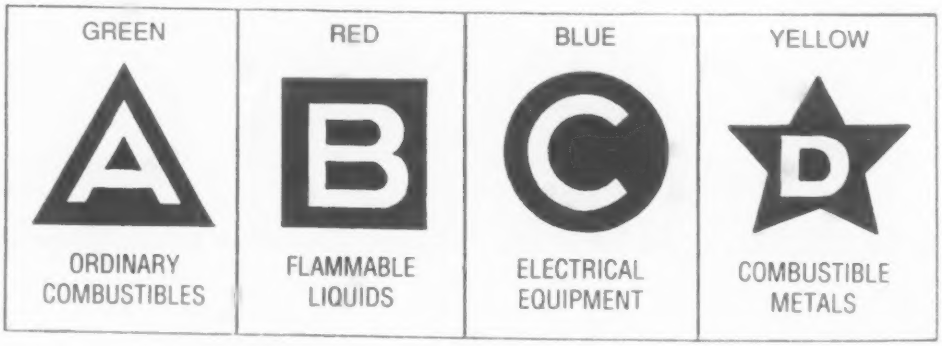
Types of fires and extinguishers

- There are different types of fires and different types of fire extinguishers to combat the different types of fires.
  - Class A Fires - Paper, wood or rubbish
  - Class B Fires - Flammable liquids such as gasoline or other petroleum products, burning grease, or anesthetic agents
  - Class C Fires - Electrical fires such as appliances or wiring
  - Class D Fires - Combustible metals (more common in industrial settings)
- The most common extinguisher is a combination type that would be effective in Class A, B, and C fires. Schools and hospitals typically have this type available.

Symbols for fire extinguishers

Letters, shapes, and colors show the classes of fires on which a labeled extinguisher can be used.



A blue background shows the classes of fires on which a labeled extinguisher can be used. A red line across a black background shows the classes of fires on which a labeled extinguisher cannot be used.

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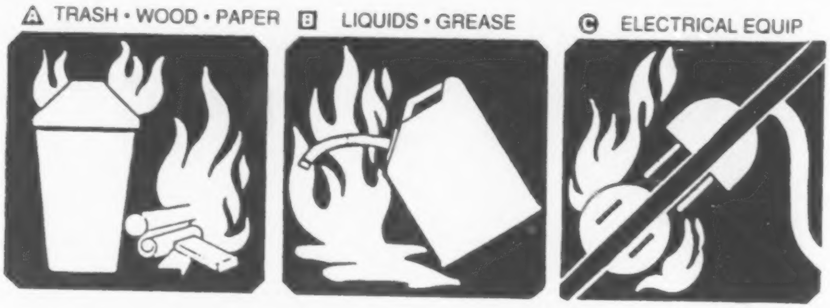

In this example, the extinguisher can be used on a Class A or Class B fire. It cannot be used on a Class C fire.

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TORNADOS

Another event with devastating consequences is a tornado. Evacuation may be necessary in a tornado as well as in a fire, but different principles prevail. In the part of the U.S. known as "Tornado Alley" (Oklahoma, Texas, Kansas and Missouri), tornado drills are advisable.

A tornado is a massive swirl of winds that can do immense damage. The higher from the ground a structure extends, the more likely that it will be damaged. The safest place during a tornado is underground. A cellar or basement is the best place to be. If such a structure is not available, the lowest level of a building is the next best place.

The rapidly rotating winds blow out windows and knock down walls. Most tornadoes approach from the southwest making those sides of a structure most vulnerable. Look for shelter in the innermost portion of a structure away from any windows. Small interior rooms such as closets or bathrooms offer the most protection. Halls that open to the west or south are not good choices. Buildings with large open spaces, mobile homes, and motor vehicles are especially unsafe. It would be better to seek shelter in an outside ditch rather than stay in one of these.

In a health care facility with multiple stories, tornado protection offers a challenge. When there is a possibility of severe weather, initial precautions include closing all windows and window coverings to minimize the risk of flying glass. At this time, patients should be advised that the possibility of severe weather exists. Tentative plans should be made for evacuation to a safer area. Each patient's mobility should be evaluated to determine how evacuation should proceed if it becomes necessary.

If the situation worsens, patients would have to be evacuated from their rooms to an interior hallway or to a lower level. Oxygen must be turned off. Each patient should be provided with extra blankets and encouraged to cover the head and eyes to prevent possible cuts.

Fortunately, modern weather prediction techniques can provide more warning than in previous years. The National Weather Bureau and the media have the capability of keeping the public informed. The first level of advance notice is the *tornado watch*. This means that the possibility of severe storms with tornadoes exists. The second, more urgent notice, is the *tornado warning*. This means that a tornado has been sighted on radar, in the air, or is on the ground. An area of potential danger is indicated and people in that area should take appropriate shelter. Metropolitan areas often have sirens that sound when a warning is in effect for the area.

OBJECTIVE 5

Select appropriate actions to take in case of a bomb threat.

Many bomb threats are pranks, but all must be taken seriously since it is impossible to distinguish a prank call from the real thing. Ignoring a real bomb threat or dismissing it as a prank could be disastrous. Anyone whose work includes answering the phone should be aware of the proper actions to take in the event of a bomb threat.

Keep the caller on the phone as long as possible. Note any identifiable voice characteristics such as an accent, word pronunciation, stuttering, pitch, or anything that would help identify the speaker. Try to make a judgement about the emotional status of the caller. Is he excited? calm? crying? screaming? etc. Listen for any background noises that would help identify the location of the caller. These might include voices, music, cars, trains, or planes.

Ask questions. Ask about the location of the bomb, the type of bomb and when it is set to go off. Ask for the name of the caller, although it is unlikely that the caller will provide a correct response. The more the caller talks, the more he will reveal about himself.

Try to remember exact words of the caller. Jot them down if possible. Make a note of the exact time that the call was received. Both may help in determining who made the call.

In some settings, it may be possible to alert a second person to begin calling for help on another line. This makes the possibility of tracing the call more likely. Whenever possible, write a note or in some way communicate what is happening to another person while the caller is on the phone. Some facilities are able to trace a call if the receiver on the receiving end is not replaced. Just to be safe, do not replace the receiver.

When the caller hangs up, begin the process of notifying the proper authorities. In a hospital setting, a call will probably be placed to the operator. The operator in turn will notify police and officials in charge at the facility. Someone with proper authority, such as a hospital or school administrator or that person's designee, must initiate evacuation.

When evacuation occurs for a bomb threat, the area must be entirely cleared. If there is an explosion, debris could cover a wide area.

When the police arrive, they will want to talk with the person who received the bomb threat. It is important to repeat all that the caller said. Any identifiable characteristics should be related to the police. Be factual and complete in communicating the information to them.

Authorities will inspect the area looking for anything suspicious that could be a bomb. Someone who knows the area should accompany them on the search to help identify anything out of the ordinary. They will be looking for sacks, boxes, or any type of container that might contain a bomb. Someone familiar with the area will be able to spot a newly placed item. During this search, it is important not to touch anything, just in case an explosive is present. If a suspicious item is located, a special bomb squad will be called to remove it.

See Supplement 1 for Bomb Threat form.

OBJECTIVE 6

Select the best word or phrase to complete statements about hazardous materials.

The old saying, "forewarned is forearmed" certainly applies when we are talking about hazardous materials. There are several types of hazardous materials that we must consider.

Every day of our lives, we use products containing chemical agents. We take them for granted and may not be aware of the hazards they might present if they are spilled on the skin, inhaled, or swallowed; mixed with other products; or stored incorrectly. At home and in the work place, chemicals are with us.

In order to protect the safety of all employees in every work place, the Occupational Safety and Health Administration (OSHA), has established the Hazard Communication Standard. The purpose of this federal guideline is to inform employees of chemical hazards that may exist in the work place. States have passed "Right to Know" laws which have the same intent.

OSHA Guidelines

According to the OSHA guidelines, "informed employees" means that:

- **Employers must have a written Hazard Communication Program** that explains the steps taken to inform employees of hazards.

- **Employers must train employees to identify and correctly use all hazardous substances.** If new substances are introduced, training in their handling must be provided.

  Workers should expect hazard communication training when they begin a new job. Each work place has its own unique set of hazards. The typewriter correction fluid in the office, the cleaning products in the custodians closet, the chemical reagents in the hospital laboratory -- all could have harmful effects if swallowed, inhaled, or spilled on the skin, depending on their composition.

- **Products used must have appropriate labels**. The first responsibility in a hazard communication program rests with the manufactures who must provide adequate labeling.

  All labels should have the following information:

  — Precautionary statement like "Caution" or "Danger" indicating that a hazard does exist.

  — A brief statement of first aid measures

  — Information on proper storage, handling and disposal

  If products are transferred into a second or smaller container for use, this container must also be appropriately labeled.

- **Material Safety Data Sheets (MSDS's) for all products that present hazards must be readily available for employee reference.** The manufacturer must supply Material Safety Data Sheets (MSDS's). These are more complete listings of the properties of a product. They must contain the following sections:

  — Ingredients in the product

- Physical and chemical characteristics such as color, odor and appearance
- Physical hazards such as potential for fire
- Health hazards, including the signs and symptoms that may result from exposure
- Routes of entry such as swallowing, inhalation, or absorption
- OSHA permissible exposure limit that tells how much is too much
- Carcinogenicity or whether the product is thought to be cancer-causing
- Precautions for handling and use, including handling of spills
- Any protective measures for use such as protective equipment needed (gloves, masks, goggles)
- Emergency and first-aid measures
- Date of preparation or update of MSDS
- Name, address, and telephone number of manufacturer for use in obtaining further information

Employers must keep the MSDS's for all hazardous chemicals in a readily accessible location available for all employees. In case of a spill or contact, the employee can then quickly consult the appropriate MSDS to determine the appropriate action.

@@@ DOC. NO. 5220 I. C. NO. 56940

REVISION 3
MATERIAL SAFETY DATA SHEET
Anderson Laboratories, Inc.
5901 Fitzhugh Avenue
Fort Worth, Texas 76119

Telephone: 1-817-457-4474

EMERGENCY CONTACT: 1-800-424-9300 (CHEMTREC)
To be used "ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS."

DATE: 3-3-92

The materials listed in this Data Sheet are classified in accordance with the definitions set forth in 29CFR Part 1910.1200.

I. PRODUCT NAME: REAGENT ALCOHOL
CHEMICAL FAMILY: N/A
DOT SHIPPING NAME: Denatured Alcohol Soln.
DOT HAZARD CLASS: Flammable Liquid
DOT I.D. NO.: NA1986

HMIS DESIGNATION:
HEALTH 2
FLAMMABILITY 3
REACTIVITY 0
PERSONAL PROTECTION: Glasses

HAZARD MATERIALS IDENTIFICATION SYSTEM

4 — Severe Hazard
3 — Serious Hazard
2 — Moderate Hazard
1 — Slight Hazard
0 — Minimal Hazard

II. COMPONENTS

			NTP/IARC	Exposure Limits		
Chemical	CAS. NO.	%	Carcinogen List	TLV	STEL	PEL
Ethyl Alcohol	67-15-5	90 (v/v)	No	1000ppm	N/A	1000ppm
Methanol	67-56-1	5 (v/v)	No	200ppm	250ppm	200ppm
2-Propanol	67-63-0	5%	No	400ppm	500ppm	400ppm

III. PERTINENT PHYSICAL DATA:

Boiling Point: 78 deg. C Vapor pressure 44mm Hg at 20 deg. C
Evaporation Rate: ___ Faster X Slower than ether. ___ Not applicable.
Vapor Density: X Heavier ___ Lighter than air. ___ Not applicable.
Appearance and odor: Colorless liquid with characteristic odor.

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@@ DOC NO. 5220 (continued)

IV. FIRE AND EXPLOSION DATA:

Flammability Classification DOT: Flammable liquid: 58 deg. F Flash Pt.
Extinguishing Media: X Foam X Alcohol Foam X Dry Chemical X Water Fog, ___ Other.
Unusual Fire and Explosion Hazards: NONE

V. HEALTH HAZARD DATA:

Effects of over-exposure: GENERAL: Prolonged exposure to excessive concentrations of ethanol may result in irritation of mucous membranes, headache, drowsiness, fatigue, and narcosis. Methanol is also narcotic in effect and its effects are cumulative. Over exposure to methanol can result in acidosis and visual disturbances which may progress to permanent loss of vision.
Toxicity Data: METHANOL: Oral-rat, LD50, 6200mg/Kg. ETHANOL: Oral-rat, LD50, 6000mg/Kg. 2-PROPANOL: Oral-human, LDLO, 2371mg/Kg.
Target Organs: Liver, central nervous system.
Primary Routes of Entry: X Dermal, X Inhalation, ___ Ingestion
Emergency and First Aid Procedures: POISON !! GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. EYES: Immediately flush with plenty of water for at least 15 minutes. Remove from airborne exposure, treat symptomatically, and get medical attention.
IF SWALLOWED: Induce vomiting by giving Syrup of Ipecac or by sticking finger down throat. Repeat until vomit fluid is clear. Give two (2) teaspoons of baking soda in glass of water. Have patient lie down and keep warm. Cover eyes to exclude light. CALL A PHYSICIAN.

VI. REACTIVITY:

Stability: ___ Unstable, X Stable
Hazardous Polymerization: ___ may occur, X will not occur
Hazardous Decomposition Products: Toxic Fumes
Conditions to avoid: Excess heat and open flames
Incompatibility (Materials to avoid) Strong oxidizing agents

VII. SPILL AND LEAK PROCEDURES:

Absorb on sand or vermiculite and place in closed container for disposal according to local, state and federal regulations.
Shut off all sources of ignition.
Flush spill area with copious amounts of water.

VIII. SAFE HANDLING AND USE INFORMATION:

Respiratory Protection:
OSHA/MSHA APPROVED RESPIRATOR: Not applicable.
Protective Gloves X Yes ___ No Eye Protection X Yes ___ No (Glasses X Goggles ___)
Aprons X Lab Coat X

IX. SPECIAL PRECAUTIONS:

WARNING! FLAMMABLE
DANGER! CAUSES EYE BURNS
WARNING! HARMFUL IF SWALLOWED
WARNING! HARMFUL IF INHALED
Do not get in eyes.
Avoid skin contact.

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@@@ DOC NO. 5220 (continued)

X SECTION 313 SUPPLIER NOTIFICATION:

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40CRF372).

CAS #	CHEMICAL NAME	PERCENT BY WEIGHT
67-56-1	METHANOL	5%
This information should be included in all MSDS' that are copied and distributed for this material.		

DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS ACCURACY OR CORRECTNESS.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY DIRECTLY OR INDIRECTLY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT OR THE INFORMATION FURNISHED THEREWITH.***

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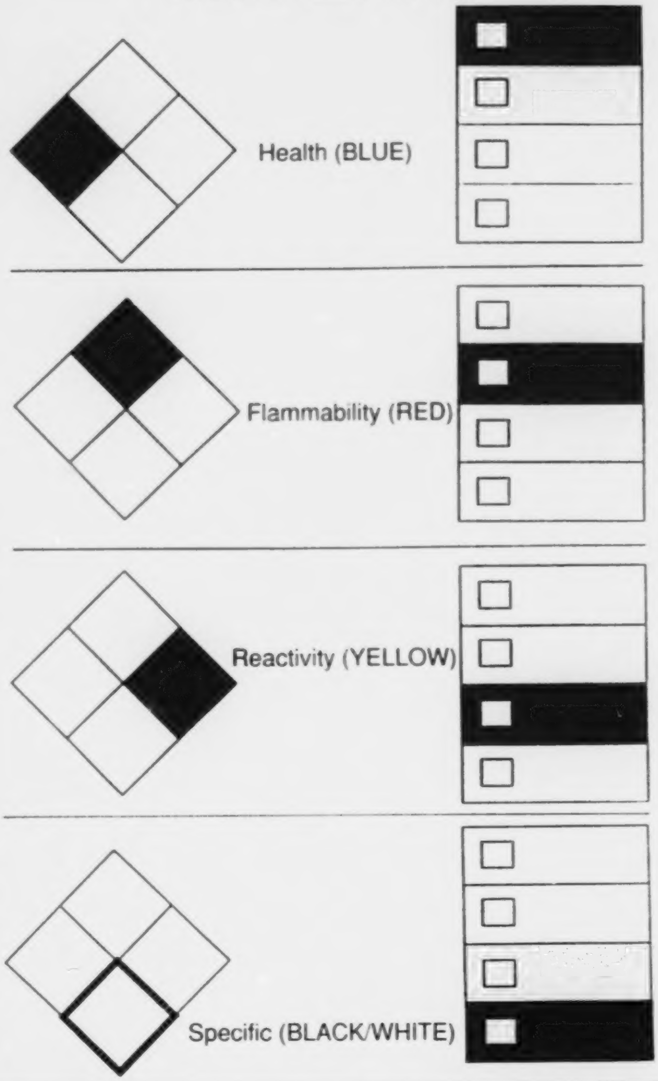
- **Chemical Information List (CIL).** Employers must have a written list of all hazardous chemicals used. It provides a quick reference without going through a great deal of information and can be of assistance to fire fighters if fire should occur. The CIL and MSDS file should have the same chemicals listed.

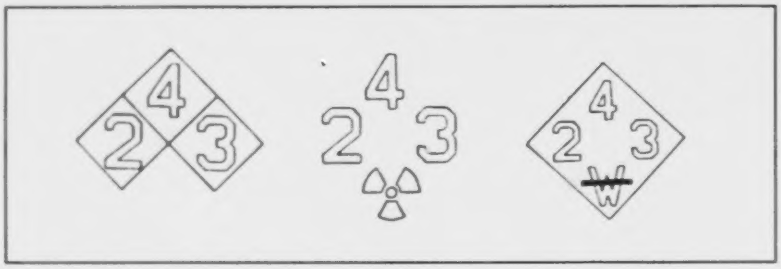
- **Hazardous materials diamond.** Warning symbols have been developed that immediately alert chemical users and emergency workers, such as fire fighters, of possible dangers. These symbols identify health, flammability, reactivity and other specific hazards. A numerical scale ranks the potential hazard with a 0 meaning "No Hazard" and a 4 meaning "A Severe Hazard." All hazard warning systems are not the same. See Supplement 2 for a list of symbols. Some samples follow.

Location of Hazard Warnings


Health (BLUE)
Flammability (RED)
Reactivity (YELLOW)
Specific (BLACK/WHITE)

*From *Safety on the Job*, CIMC Publication, Oklahoma Department of Vocational and Technical Education, Stillwater, OK

NOTE: A "specific" hazard usually indicates a substance or chemical's unusual reactivity with water. Other hazards that may be specific for a hazardous material are radioactivity, whether the material is an oxidizer, corrosive, acid, alkali, etc., as well as the proper fire extinguishing agents required or the types of personal protective equipment needed in case of fire or other emergency involving the hazardous material.



Types of hazardous materials found in the health care field.

- **Body fluids** — Any secretion or excretion of the body may contain pathogenic organisms that can cause disease. This includes saliva, mucus secretions of the respiratory system, urine, feces, drainage from wounds, and especially BLOOD. Blood can be an extremely hazardous material.

- **Equipment and materials** — Items that can come in contact with body fluids can become contaminated and therefore present a hazard. We must recognize these hazards and learn how to deal with them in order to protect ourselves and our patients.

  EXAMPLES: Dirty bed linen, soiled dressings, used needles, syringes, catheters, bedpans, etc.

- **Flammable gases** — Proper use is essential to prevent fire and accidents.

  EXAMPLES: Oxygen, used as a treatment measure, and other gases such as carbon dioxide or nitrous oxide, often used in surgery

- **Radiation and radioactive substances** — Used as diagnostic and treatment measures. They present great danger if not handled correctly.

- **Electrical appliances** — Hazardous if not maintained and used correctly. An increasing number of electrical devices may be found in the health care setting.

- **Chemicals** — Some medications can have harmful effects on the skin and mucus membranes. Medications used as chemotherapy agents in the treatment of cancer have been found to have a number of harmful effects. Care must be taken in handling these medications.

OBJECTIVE 7 **Discuss the proper use of equipment and materials for handling hazardous wastes.**

Protective clothing, disposal devices and containers are especially designed to protect the health care worker. It's important to your health and safety and to that of your patients and coworkers that you know how to use these items correctly.

Gloves

- "Clean" gloves are intended for the protection of the worker. They should be worn whenever there is a possibility of coming into contact with secretions or excretions of the body.
- Gloves should be worn when:
  - — Emptying bedpans or urinals
  - — Changing soiled linens
  - — Cleaning areas of the body where drainage might be present
  - — Giving enemas
  - — Cleaning soiled equipment
  - — Whenever there is any possibility of coming into contact with blood
- An important item in the health care setting today, gloves are made of latex or vinyl. When clean gloves have come into contact with any secretions or excretions, discard them. Continuing to wear soiled gloves could contaminate many surfaces. They are then doing more harm than good.
- Remove gloves so that the hands don't touch soiled surfaces.
- Always wash your hands after removing gloves. There is always the possibility of a minute break in the glove, allowing contamination of the hands.

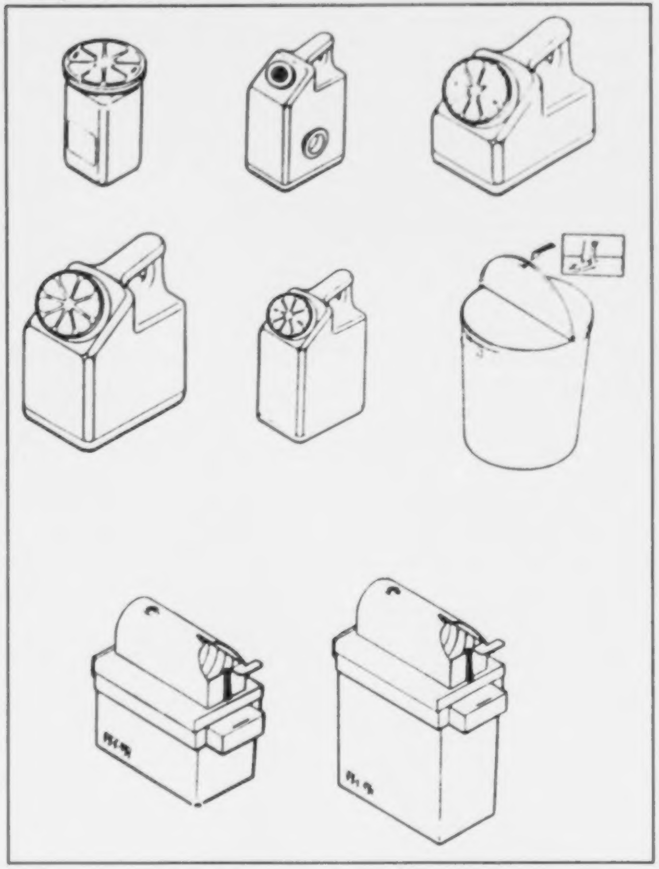
Gowns

- Gowns are worn when there is a special need to protect clothing from pathogenic organisms, such as in the presence of an infected wound. Masks and/or goggles may be worn when there is a danger of blood splattering.

Sharps containers

- Special containers are provided for disposing of all sharp items.
- Needles are not recapped after use to avoid the danger of a puncture with the contaminated needle.
- The entire needle and syringe are placed directly into a covered container.
- The container is not emptied, but sealed when full and then the entire container is thrown away.

*Sharps containers



Trash cans

Trash cans are lined with plastic liners and the entire liner is removed and tied closed for further disposal. Items removed from the patient such as dressings, catheters, and nasogastric tubes should be placed in this plastic lined trash container. It is a good idea to empty the container frequently.

Body fluid containers

Containers used for collecting fluids from the patient by suction, such as a container holding contents from nasogastric suction, are not emptied, but placed inside a plastic bag and discarded in the trash.

*Used with permission of PRO-TEC™ Containers, Inc., St. Petersburg, FL 33742.

One-use-only or one-patient-use equipment

These items are intended for use once or at least for only one patient and then discarded. This helps minimize the transfer of pathogenic organisms. They should be used as intended and then discarded in an appropriate container.

EXAMPLES: Syringes, enema buckets, emesis basins and bedpans

OBJECTIVE 8

Select from a list appropriate actions to take to ensure the patient's safety.

Health care workers have a tremendous responsibility for the safety of patients. People who normally could meet all their own needs for safety may be totally dependent upon others when weakened by illness. Many elderly patients have decreased sight, hearing, mobility, or awareness, making safety precautions more important. The young patient may not be aware of hazards and be curious about the environment. All of these factors make safety a primary concern for the nurse.

About 70% of all accidents in a health care facility are related to *falls*. The second most common type of accidents is *burns*. Other major types of mishaps involve *asphyxiation, poisoning, misidentification*, or *the spread of pathogenic organisms*.

To prevent falls, the nurse should:

- Keep siderails up.
- Keep the bed at its lowest level.
- Keep the call light within reach of the patient at all times.
- Keep necessary items within reach of the patient.
- Keep the wheels of the bed locked.
- Keep the wheels of stretcher and wheelchairs locked during transfer activities and teach the patient to do so if he will be transferring on his own.
- Keep gatch handles on beds folded out of the way.

- Provide non-skid foot wear.
- Keep equipment out of hallways.
- Do not allow electrical wires to be strung across the floor.
- Keep the floor free of debris.
- Wipe up all spills promptly.
- Provide adequate assistance for the weak patient.
- Monitor the patients who have received medication that may make them drowsy or dizzy.
- Answer call lights promptly.
- Instruct the patient to call for help with ambulation.
- Open doorways cautiously to avoid knocking someone down.
- Approach corners cautiously to avoid colliding with someone.
- Provide adequate lighting, including night lights.
- Report problems such as torn carpeting, loose floor tiles, or broken handrails.
- Remove all objects such as trash cans from under bed when lowering it.

  NOTE: When the bed is lowered on to such an object, it may tilt to the side, rolling the patient against the siderails or to the floor.

- Instruct patients to use handrails or similar assistive devices.
- Apply safety devices when necessary.

To prevent burns the nurse should:

- Check water temperature of solutions for bath water, enemas, hot wet packs, and other treatments.
- Position the patient's tray so hot liquids will not spill.

- Assist patients with hot liquids if they have difficulty in handling them alone.

- Check the skin frequently when treatments such as hot wet packs or heat lamps are used.

- Check electrical equipment for problems such as frayed cords or broken plugs before use.

- Monitor smoking.

- Take precautions when oxygen is in use:

  - Post no smoking signs.

  - Do not permit the use of electrical appliances such as electric razors.

  - Be aware of the danger of static electricity.

To prevent asphyxiation the nurse should:

- Position the patient as upright as possible when giving food or fluids.

- Position the unconscious patient on his side, especially when administering oral hygiene.

- Check nasogastric tube placement before instilling any liquid.

- Do not leave a weak patient or small child alone in bathtub.

- Give small bites when feeding a patient and allow adequate time for swallowing.

- Be prepared to administer the Heimlich maneuver and CPR if necessary.

To prevent poisoning the nurse should:

- Keep all poisonous substances away from food or medications.

- Keep labels readable.

- Do not store anything in unlabeled containers.

- Avoid spraying aerosol sprays in the presence of food or liquids to be consumed.
- Monitor small children or disoriented patients carefully.
- Store medication in a locked cart or room.
- Ensure that only persons with adequate training administer medications.

To prevent mishaps with misidentification:

- Be sure that all patients are wearing identification bands.
- Check identification bands before administering medication or treatments.
- Verify any doctor's orders or instructions from other personnel if the orders do not seem consistent with the patient's condition.

To prevent the spread of pathogens the nurse should:

- Wash hands thoroughly before, during, and after patient care.
- Provide thorough personal hygiene measures for the patient.
- Handle equipment and supplies carefully.
- Dispose of waste and used supplies correctly.
- Clean equipment thoroughly.
- Follow all infection control measures instituted by the health care institution.

OBJECTIVE 9

Arrange in order the steps for handling an incident or error involving self or others.

Even though many preventive measures are taken, accidents do happen in every setting. The school and the health care setting are no exceptions. Since accidents are inevitable, everyone should be aware of the steps to take when one occurs.

NOTE: All actions are important, but focus first on the person involved in the accident.

1. Check the victim's condition. Observe carefully so a complete description can be recorded. Knowledge of first-aid procedures will help make this observation. The first priority is always an adequate airway.

2. Call for help. Send someone for additional help, call out for help, use the telephone, or in a patient's room, turn on the call light.

   Avoid moving someone who has fallen until it can be done safely. If back injuries or broken bones are involved, moving the patient without adequate help and support could worsen the situation.

3. Report the accident to a person in authority. In a health care setting, this may be the head nurse or clinical manager, a nursing supervisor, or the doctor, depending upon the situation. Someone will notify the doctor and obtain further orders for treating the patient.

4. Provide comfort and reassurance for the patient or individual involved.

5. In the clinical area, a complete account should be entered in the patient's chart. This should include the exact events if they were witnessed, the observations made of the patient's condition, the actions taken, who was notified and what additional action was taken after the doctor was notified. Be complete and factual.

   NOTE: From a legal standpoint, it is considered best not to mention completion of an incident report.

6. The final step is completing an *accident report* or *incident report*. This report is intended for use in studying the situation and attempting to prevent future occurrences. It should not be looked upon as a punishment or as an admission of guilt. In a health care setting the word "incident" is used to mean anything out of the ordinary. It may involve patients, visitors, or personnel.

EXAMPLES:

- A patient falls as he walks to the bathroom.
- A visitor faints when he sees the patient's incision.
- A nurse administers the wrong dose of medication.
- A nurse sticks herself with a contaminated needle.
- A child who is visiting slams a door on his finger.

In each case, an incident report should be completed. The report should be completed promptly and completely. Many health care facilities use forms supplied by insurance companies. Insurance companies would be interested in having a complete description of the event in case someone involved made a claim against the policy held by the health care facility.

In most cases, the incident report is forwarded to a safety committee for review and study. This committee is dedicated to correcting existing problems and to making the facility a safe place for all who work and seek treatment there. The incident report is not a part of the patient's chart and it should not be mentioned in the chart.

Refer to Supplement 5 for a sample incident report form.

ACCIDENT PREVENTION

- Install rails around bathtub, showers, and toilet stools when patients have impaired mobility.
- Wear seat belts in motor vehicles.
- Provide appropriate car seats for infants and small children in motor vehicles.
- Store substances in original, clearly marked containers.
- Do not store flammable liquids near a heat source.
- Keep and know the location of a fire extinguisher in the car and home.
- Do not allow any accumulation of flammable items such as papers or rags.
- Keep walkways free of any barriers or clutter.
- Store any poisonous substances and medicines out of reach of small children or disoriented individuals.
- Do not stand on the top rung of a ladder.
- Use only a sturdy ladder for climbing.
- Do not use electrical appliances with frayed cords.
- Do not allow small children or helpless individuals to remain alone in a bathtub.
- Do not allow bath water to run while a patient is in the tub.
- Do no allow individuals to smoke in bed.
- Do not mix cleaning substances.
- Keep labels readable.
- Do not store matches in reach of children.

- Do not use electrical appliances in or near water.
- Unplug electrical appliances before inspecting them.
- Keep all necessary items in reach of an individual with impaired mobility.
- Do not allow children or disoriented individuals to take medicines without supervision.
- Keep stairways clear.
- Do not allow trash to accumulate.
- Keep poisonous substances in a locked cupboard when small children are present.
- Install smoke alarms.
- Establish a home evacuation plan.
- Keep emergency phone numbers posted.

  NOTE: In many communities 911 reaches all emergency personnel.

- Teach children how to obtain emergency assistance.
- Encourage family members to learn CPR.

PROCEDURE FOR A TELEPHONED BOMB THREAT*

Keep the caller on the line!

Write down the exact words of the threat.

Exact time of call

Length of call

Number where call was received

Questions to ask the caller:

When is the bomb going to explode?

What does it look like?

Did you place the bomb?

What is your name?

Where is it right now?

What kind of bomb is it?

Why did you place the bomb?

What is your address?

Try to determine:

Sex of caller

Race

Approximate age

Was the caller's voice:

Calm
Nervous
Soft
Distinct
Raspy
Accented
Angry
Slow
Loud
Slurred
Deep
Disguised
Excited
Rapid
Nasal
Whispered
High pitched
Familiar

Was there:

Laughing
Lisping
Crying
Deep breathing
Stuttering
Throat clearing

---

*Adapted and used with permission of the Choctaw Nation Indian Hospital and Kiamichi Area Vocational Technical School, Talihina, Oklahoma.

What noises were in the background:

Street noises
Voices
Music
Office noises

Factory machines
PA system
Planes
Motors

Animal noises
Static
Trains
Radio/Television

Comments: ____

____

____

____

____

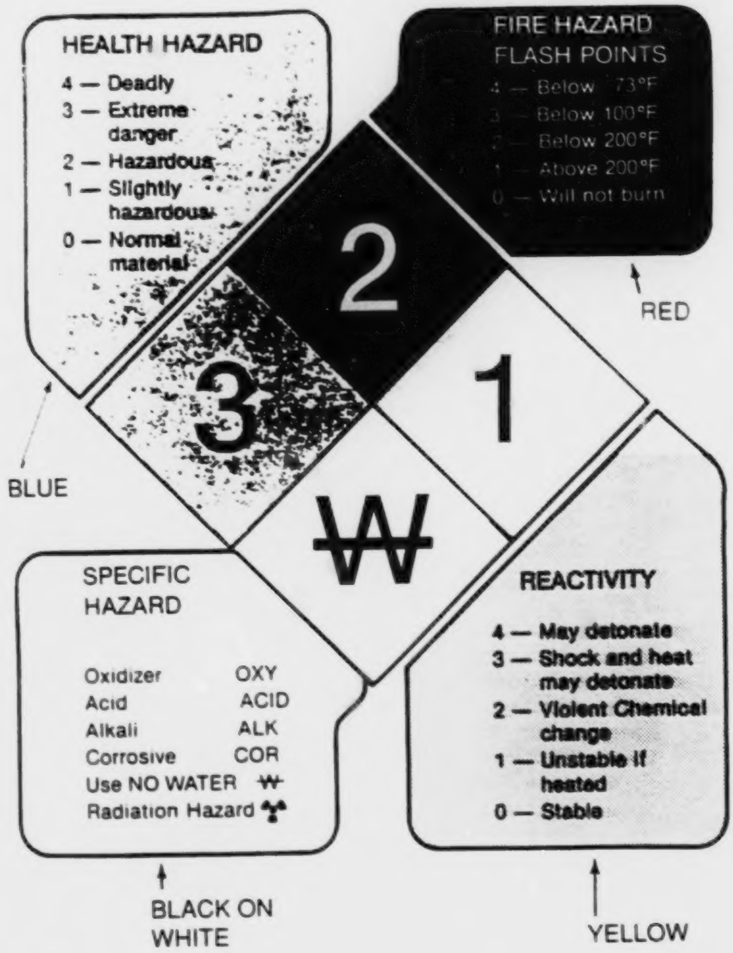
HAZARDOUS MATERIALS CLASSIFICATION SYSTEM

Blue, left-hand diamond — Health hazards

Red, top diamond — Fire hazard

Yellow, right-hand diamond — Reactivity

Black on white, bottom diamond — Specific hazards


HEALTH HAZARD
4 — Deadly
3 — Extreme danger
2 — Hazardous
1 — Slightly hazardous
0 — Normal material
FIRE HAZARD
FLASH POINTS
4 — Below 73°F
3 — Below 100°F
2 — Below 200°F
1 — Above 200°F
0 — Will not burn
RED
2
3
1
₩
BLUE
SPECIFIC HAZARD
Oxidizer OXY
Acid ACID
Alkali ALK
Corrosive COR
Use NO WATER ₩
Radiation Hazard ☢
REACTIVITY
4 — May detonate
3 — Shock and heat may detonate
2 — Violent Chemical change
1 — Unstable if heated
0 — Stable
BLACK ON WHITE
YELLOW

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SAFETY PRECAUTIONS

In all nursing procedures and in the Job Sheets you will complete in this course, some of the same instructions will appear. They are there, in large part, because they are safety precautions. Some of them may not look exactly like safety precautions, but they do contribute to completing the procedure in a safe manner. Let's examine their implications for safety.

Wash hands — Washing hands will prevent the spread of pathogenic organisms to the patient. This is a major concern when we consider the patient's safety.

Assemble equipment — Having everything ready for use before beginning means you will not have to leave the patient in an unsafe position to get a missing item. Leaving the patient during some procedures could lead to falls or contamination of equipment, risking the spread of pathogenic organisms.

Identify patient — Misidentification is a major safety hazard. Always make sure you have the patient who needs the treatment or medication to be administered.

Explain the procedure to the patient — An informed patient is more likely to be a cooperative patient. A cooperative patient makes it easier to complete the task in a safe manner.

Provide privacy — Once again, this will help assure a more cooperative, relaxed patient. One who is worried about having his body exposed to others, may be less cooperative, making it harder to complete procedure in a safe manner.

Clean and return equipment, leaving unit and all work areas neat — Cleaning, of course, prevents the spread of pathogenic organisms, but it may also mean removing debris and spills that could lead to falls.

Leave patient comfortable, with call light in reach — Making the patient comfortable with everything he needs will prevent him from trying to reach for something or getting out of bed when he should not, resulting in a fall. Having the call light allows him to call for anything we may have forgotten.

Record, report procedure and results — When we let others know that a treatment was performed or a medication given, we prevent others from repeating it, which could be very dangerous for the patient.

STILLWATER MEDICAL CENTER

INCIDENT REPORT

(The person most closely involved or the person discovering the incident should complete this form as soon as possible.)

Addressograph Plate
(If not Addressograph, Write in name, age, sex and chart number)

For a visitor incident please include address and telephone number

Age

Sex ☐ M ☐ F

Date of Admission

Time of Incident/Occurrence ☐ AM ☐ PM

Date of incident/Occurrence

Chart No (Enter 10 last numbers)

A. Identification ....
1) Inpatient 2) Outpatient 3) Emergency Patient 4) Visitor 5) Employee

B. Duty Shift ....
1) 7-3 2) 3-11 3) 11-7

C. Incident/Occurrence Location Code .... (see reverse side for listing)

D. Type of Incident/Occurrence *(Identify the type of the incident/occurrence using the code listing on reverse side)*

E. Brief Objective Description *(Should be factual information only. Include vital signs, follow-up care - x-rays, lab, etc.)*

F. Nature of Injury ....

01 Abrasion, Bruise, Contusion
02 Aggrev. of Pre-Exist. Cond.
03 Allergic Reaction
04 Amputation
05 Asphyxia/Anoxia
06 Back Injury
07 Burn
08 Concussion
09 Drug Reaction/Toxicity
10 Drug Overdose
11 Decubitus Ulcer
12 Deterioration of Mental Status
13 Electric Shock
14 Fracture
15 Hemorrhage
16 Infection/Contagious Disease
17 Injection Site Injury
18 Internal Injury
19 Laceration
20 Myocardial Infarction
21 Neurological impairment
22 Puncture
23 Pulmonary Embolism
24 Sprain/Strain
25 Skin irritation
26 Vascular Impairment
27 Visual Loss Impairment
28 Wound Disruption
29 Other
30 Unable to determine
31 None/Not Applicable

G. Severity Of Injury ....

1) No apparent injury (no injury of any type is noted)
2) Minor (injury is temporary and does not cause further complications) Example: Abrasion
3) Major (injury is serious, causing considerable discomfort, requiring extended treatment or if life threatening to the patient)
4) Death (use if the patient dies and this may be directly attributed to the incident/occurrence)
5) Not Applicable
6) Unable to determine (use if it is impossible to determine the extent of injury relating to the incident/occurrence)

Continue to complete Section H - K for an Incident only.

H. Physical Facility, Equipment, or Supplies ....

01 Not Involved
02 Bathroom
03 Cart-Stretcher
04 Chair/Wheelchair Crutches/Walker
05 Electrical Device
06 Floor
07 Parking Lot/Sidewalk
08 Lighting
09 Oxygen/Other Gases
10 Restraints
11 Siderails
12 Exam Table
13 Lab Equipment/Supplies
14 X-Ray Equipment
15 Pharmacy Supplies
16 Medex
17 Nursing Care Plan
18 Other

Time Lost Yes ☐ No ☐

Number of days off ______

I. Safety Device *(Check appropriate box, etc.)*

☐ Not Applicable ☐ Not Used ☐ Not Available ☐ Didn't Work

If the incident involved equipment, write the equipment I.D. number and present location ______________________

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J. Patient/Employee Related Factor ....

01 Aphasic
02 Bowel/Bladder Problem
03 Blind
04 Confused/Disoriented
05 Call Light Not Used
06 Failure to Keep or Sched. Appt.
07 Employee Did Not Follow Pol./Proc.
08 Hearing Impaired
09 Horseplay/Rowdiness
10 Improper Body Mechanics Used
11 Improper Footwear
12 Unable to Follow Orders
13 Language Barrier
14 Med./Surg. Condition
15 Mental Status
16 Medication past 4 hours
17 Pt. Gave Incor./Inaccur. Info
18 Refused to Follow Orders
19 Seeking Attention
20 Visitor Assisting Patient
21 Unexpected Movement
22 Not Applicable
23 Other ____________________

K. Facts of the Patient Incident/Occurrence Recorded on Medical Record ☐ Yes ☐ No ☐ Not Applicable

L. Referred For Treatment: ☐ Yes ☐ No ☐ Refused ☐ Not Applicable

Treatment Given By: ☐ Physician ☐ Emergency Dept. ☐ Employee Health ☐ Other

Person Completing Report ____________________ Witness ____________________

Personal Physician ____________________ Time and Date Notified ____________________

SUPERVISORS: The Quality Assurance/Risk Management Department should be notified immediately (or within the next working day) in the event of all occurrences and any incident involving an injury.

CONFIDENTIAL NOT A PART OF PATIENT MEDICAL RECORD

INCIDENT: Is an event not consistent with the desired operation of this facility or the care of the patients.

Treatment/Procedures

001 Incorrect Amount
002 Incorrect or Unordered
003 Intubation
004 Omitted
005 Undesired Effect
006 Articles Left in Patient
007 Consent
008 Performance/Technique
009 Wrong Time

Meds. I.V. or Anesthesia

010 Dosage or Rate Incorrect
011 Omitted
012 Route Incorrect
013 Undesired Effect
014 Frequency or Time Incorrect
015 Not Ordered
016 Wrong Med Given
017 Medication Theft/Missing
018 Wrong Patient
019 Labeled Incorrectly

Miscellaneous

020 Assault
021 Back Injury
022 Caught In/Out Between
023 Chemical
024 Contamination/Exposure
025 Diet
026 Electrical
027 Equipment — Misuse
028 Equipment — Malfunction
029 Fall/Slip
030 Fire — Patient Smoking
031 Heat (Thermal)
032 Ingestion/Inhalation
033 Needle Stick
034 Patient OOB — No Fall
035 Patient Departure
036 Patient/Family Complaint
037 Personal Articles — Loss/Damage
038 Struck Against
039 Struck by
040 Specimen Lost
041 Other

01 Admissions/Business Office
02 Anesthesia
03 Building/Grounds
07 Central Sterile
09 Gift Shop/Snack Bar
10 Dialysis
11 Dietary
12 Emergency Department
24 Housekeeping
25 ICU
28 Laboratory
30 2nd Floor
31 3rd Floor
33 5th Floor
45 Medical Records
47 Nuclear Medicine
48 Nursery
49 Labor & Delivery
56 Outpatient Surgery
58 Pharmacy
59 4-South
65 Recovery
67 Respiratory Therapy
69 Social Services
71 Surgery
84 Physical Therapy
86 Education
88 Purchasing
89 Accounting/Data Processing
90 Radiology

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ASSIGNMENT SHEET 1

PRACTICE SAFETY PROCEDURES II

NAME ______________________________ SCORE ________

OBJECTIVE 10 **Maintain a safe school and working environment.**

INTRODUCTION Safety involves many actions. Thinking about the actions and the reasons behind those actions will help avoid injury for ourselves and our patients.

DIRECTIONS View the 3 safety videos and answer the questions.

Listening Skills
- Apply active listening skills

Part 1 — Body Mechanics

1. List reasons body mechanics are important.

____

____

____

____

2. Complete the following statement about the basic principles of physics involved in body mechanics.

Balance is more stable when the base of support is ________________ and the line of gravity passes through the ________________ and near the middle of the ________________.

3. Poor body mechanics can contribute to what common health problem?

____

____

____

____

4. Describe good posture when standing.

____
____
____
____

5. Describe good posture when sitting.

____
____
____
____

6. Describe good body mechanics when lifting.

____
____
____
____

7. Describe good body mechanics when reaching.

____
____
____
____

8. List some rules of body mechanics to make work easier and safer.

Part 2 — Fire and Hazardous Materials

1. The first step in accident prevention is

2. The second step in accident prevention is

3. What steps taken in advance can help save lives in case of a fire?

4. List actions which will **prevent** fires?

____

____

____

____

5. What is meant by the acronym RACE?

R ______________________________

A ______________________________

C ______________________________

E ______________________________

6. In what ways might products containing chemical agents cause harm?

____

____

____

____

7. The purpose of the hazard communication standard is to

____

____

____

____

8. Information on a product label must include

9. Complete information on the properties of a product can be found in the

10. All hazardous chemicals found in the work area must be included on a/an

Part 3 — **Burns, Falls, Asphyxiation, Poisoning, Misidentification and Pathogenic Organism**

1. Why are safety precautions so important in a health care facility?

2. What is the most common type of accident in health care facilities?

3. What other types of accidents are of concern to nurses?

4. How can falls be prevented?

5. How can burns be prevented?

6. How can asphyxiation be prevented?

7. How can poisoning be prevented?

8. How can misidentification be prevented?

9. In what substances will the nurse find pathogenic organisms?

10. On what equipment might pathogenic organisms be found?

11. What steps must the nurse take to prevent the spread of pathogenic organisms?

PRACTICE SAFETY PROCEDURES

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

Skill development for: ORAL COMMUNICATION SKILLS

- Introduce the assignment to the students by discussing why oral communication skills are important.
- Discuss with them the following skills which are relevant to this task:

  ORAL COMMUNICATION SKILLS

  — Applying active listening skills
- If students have difficulty applying active listening skills:
  - — Discuss the main ideas to be presented in the video before the video is shown.
  - — Suggest that they be ready to listen before beginning the communication.
  - — Stress the importance of focusing on the speaker or film.
  - — Instruct them to note the key ideas in the video.

ASSIGNMENT SHEET 2

PRACTICE SAFETY PROCEDURES II

NAME ______________________ SCORE ________

OBJECTIVE 11

Use proper handling and disposal techniques for hazardous materials.

INTRODUCTION

Labels give us much valuable information, but we must read the *entire* label because directions and cautions are not always just on one panel of the product container. We must also know how to interpret warning symbols and respond appropriately to hazardous materials.

DIRECTIONS

On the next several pages you will find labels from various products used in your nursing laboratory and in the clinical area. Study the labels and then answer the questions.

Part 1 — Interpret a Clinitest® label

Part 2 — Interpret an Ultra-Kind® Gentle Wash label

Part 3 — Interpret a hazardous materials diamond

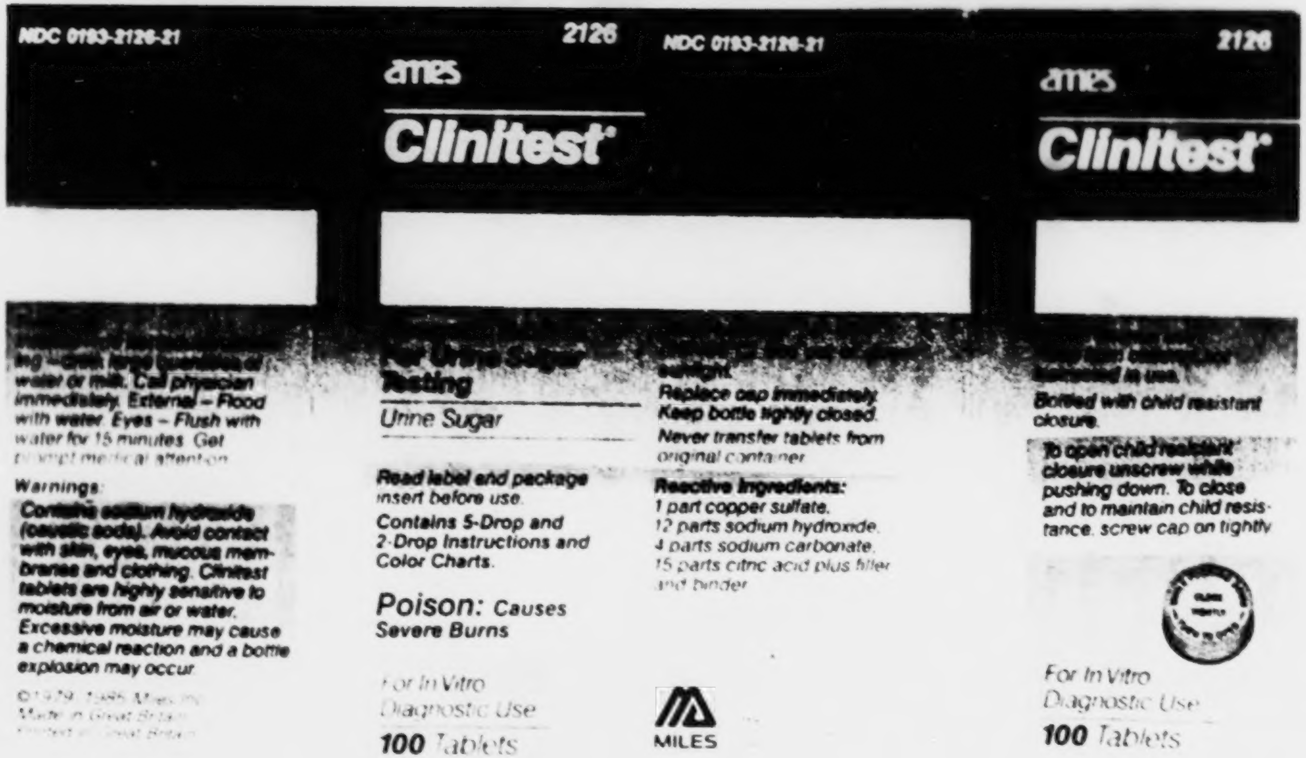
Part 4 — Describe how to protect yourself and others in disposing of hazardous materials

Reading Comprehension Skills
- Gain factual information

Functional Reading Skills
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Job Acquisition/Development Skills
- Master specified job task/procedure
- Practice good work habits/attitudes

*Used with permission of Miles, Inc., Diagnostics Division



NDC 0193-2126-21

2126

ames

Clinitest*

NDC 0193-2126-21

2126

ames

Clinitest*

[illegible] ing – drink large quantities of water or milk. Call physician immediately. External – Flood with water. Eyes – Flush with water for 15 minutes. Get prompt medical attention.

Warnings:

Contains sodium hydroxide (caustic soda). Avoid contact with skin, eyes, mucous membranes and clothing. Clinitest tablets are highly sensitive to moisture from air or water. Excessive moisture may cause a chemical reaction and a bottle explosion may occur.

©1979, 1985 Miles Inc.
Made in Great Britain
Printed in Great Britain

For Urine Sugar Testing

Urine Sugar

Read label and package insert before use.

Contains 5-Drop and 2-Drop Instructions and Color Charts.

Poison: **Causes Severe Burns**

For In Vitro Diagnostic Use

100 Tablets

[illegible] sunlight.

Replace cap immediately. Keep bottle tightly closed.

Never transfer tablets from original container.

Reactive Ingredients:
1 part copper sulfate.
12 parts sodium hydroxide.
4 parts sodium carbonate.
15 parts citric acid plus filler and binder.

MILES

[illegible] in use.

Bottled with child resistant closure.

To open child resistant closure unscrew while pushing down. To close and to maintain child resistance, screw cap on tightly.

For In Vitro Diagnostic Use

100 Tablets

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Part 1

1. What is the name of the product?

____

2. What is it used for?

____

3. What is the wording of the precautionary statement?

____

____

4. What three measures should be carried out if a tablet were swallowed?

____

____

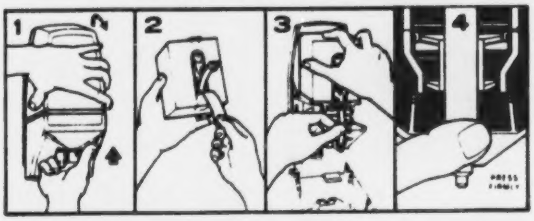
____

5. What hazardous situations could occur with excessive moisture?

____

Part 2

LOADING OF DISPOS-a-PUMP®



Ultra-Kind® Gentle Wash is an enriched hand cleanser formulated especially for high incidence washing. **Special** mild surfactants and emollients are blended for maximum gentleness, moisturizing, and cleaning.
DIRECTIONS: Wet skin and apply a small amount of cleanser. Rub hands together briskly for rich lather. Rinse and dry thoroughly.
FOR EXTERNAL USE ONLY: In case of accidental ingestion, seek professional assistance or contact a Poison Control Center immediately.
FOR PROFESSIONAL USE ONLY

Protect from freezing; avoid excessive heat.

Sani-Fresh International • San Antonio, TX 78218
A Unit of Scott Paper Co.
For service call 1-800-443-0001
Inside Texas (312) 661-0505

is a registered trademark of Sani-Fresh International

1. What is this product used for?

____

2. Where would you write if you wanted to obtain an MSDS for this product?

____

____

---

*Used with permission of Scott/Sani-Fresh International, Inc.

3. What should be done if this product were swallowed?

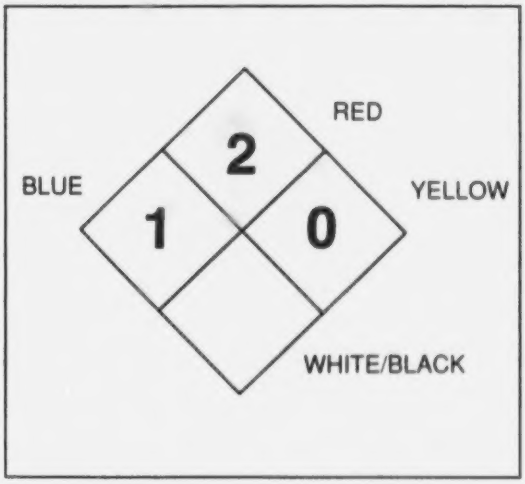
____

____

Part 3

If you saw the following symbol on a product, what type of hazard would be greatest?

____


RED
2
BLUE
1
0
YELLOW
WHITE/BLACK

Part 4

Briefly describe how to protect yourself and others in disposing of the following materials.

1. A urinal full of urine

   ____

2. A suction canister

   ____

   ____

   ____

3. A soiled dressing

   ____

4. A used needle and syringe

   ____

5. The contents of the waste basket in the patient's room

   ____

   ____

6. The patient's bath basin after he has left the hospital

   ____

PRACTICE SAFETY PROCEDURES

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 2

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  — Gaining factual information

  — Interpreting graphics and symbols

  EMPLOYABILITY SKILLS

  — Mastering a specific job task/procedure

  — Practicing good work habits/attitudes

- If students have difficulty gaining factual information, have them read the information several times, noting the key words and ideas.
- If students have difficulty interpreting graphics and symbols:

  — Stress the importance of learning safety symbols

  — Examine the structure of the charts.

- If students have difficulty mastering a specific job task/procedure:

  — Emphasize the fact that practice makes a person proficient and proficiency makes a person confident.

  — Review the entire procedure.

  — Suggest they study each component of the procedure to determine which area is causing difficulty.

- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the procedures before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.
  - Make sure the student knows what is expected of him or her.

ASSIGNMENT SHEET 3

PRACTICE SAFETY PROCEDURES II

NAME ______________________________ SCORE ________

OBJECTIVE 12 **Document an incident on the appropriate form.**

INTRODUCTION Information on an incident report must be clear, complete and concise. Yet, when one is needed, the stress of the situation may make this difficult to accomplish. Practice ahead of time may help the process go more smoothly.

DIRECTIONS Use an incident report provided by your instructor to document the information about the following incident.

Functional Writing Skills
- Complete forms and records

At 9:00 A.M. of the current date, you hear a noise in room 200 and go to investigate. The patient in that room is Mr. John Blaylock, a 79 year old male who is in the hospital for pneumonia. You find Mr. Blaylock lying on the floor between the bed and the bathroom door.

Mr. Blaylock begins explaining to you that he was getting up to the bathroom and he thinks he slipped on something wet on the floor. He answers all questions appropriately. He moves both arms and legs, but complains of pain with movement in the right arm. There is a scraped area over the right elbow which is bleeding slightly.

You turn the call light on and stay with Mr. Blaylock. The registered nurse, Betty Jones, comes to the room and after assessing Mr. Blaylock, assists you to return Mr. Blaylock to bed. She checks Mr. Blaylock's pulse, respirations, and blood pressure and tells you the readings are P-76, R-18, and BP-140/86. She calls Dr. Swift, Mr. Blaylock's doctor, who orders an X-ray of Mr. Blaylock's arm. The nurse applies a small dressing to the elbow.

You look carefully at the spot on the floor where Mr. Blaylock fell and you find a small area of what appears to be water on the floor. You wipe up the area.

PRACTICE SAFETY PROCEDURES

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 3

Skill development for: WRITING SKILLS

- Introduce the assignment to the students by discussing why writing skills are important.
- Discuss with them the following skills which are relevant to this task:

  WRITING SKILLS

  — Completing forms and records

- If students have difficulty completing forms and records:

  — Stress the importance of accuracy in documenting.

  — Examine the structure of the form.

ASSIGNMENT SHEET 1

Answers should include:

Part 1

1. Prevents injury and fatigue
   Increases efficiency
   Improves health and appearance
   Sets a good example

2. broad
   center of gravity
   base of support

3. Back pain

4. Stand erect
   Arms close to body and hanging straight down
   Head erect
   Shoulders back
   Chest slightly out
   Pull up buttocks
   Hold in abdomen
   Knees slightly flexed
   Point toes forward
   Feet slightly apart for broad base of support

5. Stand close to chair
   Place foot under chair to broaden base of support
   Lower body and shift weight of trunk towards the back
   Hold vertebrae straight as possible
   Feet flat on floor

6. Bend at hips and knees to lower body to floor
   Keep back straight
   Position body directly in front of object
   Place feet slightly apart for side base of support
   Hold object with both hands
   Use leg muscles to lift to waist level
   Ask for help for heavy objects

7. Stand close to object with feet flat
   Extend arms to reach object
   Use arm muscles to bring object to waist level
   Keep back straight

8. Adjust beds to comfortable working level
   Bend knees
   Keep back straight
   Get close to work
   Carry objects close to body
   Ask for help when load is heavy or large

Part 2

1. Being aware of possible hazards

2. Practicing preventative measures

3. Fire drills
   Clearly marked exits
   Know location of fire extinguishers

4. Monitor smoking
   No smoking when oxygen in use
   Keep electrical equipment in good condition
   Do not use equipment in poor repair

5. R — Remove or rescue patients in immediate danger
   A — Activate the alarm system
   C — Contain the fire
   E — Extinguish the fire

6. Spilled on skin
   Inhaled
   Swallowed
   Mixed with other products
   Stored incorrectly

7. Inform employees of chemical hazards in the work place

8. Precautionary statement
   First aid measures
   Storage
   Handling
   Disposal

9. MSDS (Material Safety Data Sheet)

10. CIL (Chemical Information List)

Part 3

1. Patients weakened by illness
   Elderly may have decreased sight, hearing, mobility or awareness
   Young patient unaware of hazards and curious about environment

2. Falls

3. Burns
   Asphyxiation
   Poisoning
   Misidentification
   Pathogenic organisms

4. Make sure siderails are up.
   Keep bed at lowest level.
   Keep call light in reach of patient.
   Keep necessary items within patient's reach.
   Keep wheels of beds, stretchers, and wheelchairs locked.
   Keep gatch handles on bed folded out of way.
   Provide non-skid footwear.
   Keep equipment out of hallways.
   Keep floor free of debris.
   Do not string electrical wire across floors.
   Clean spills promptly.
   Report problems such as torn carpeting, loose floor tiles and broken handrails.
   Open doors cautiously.
   Approach corners carefully.
   Monitor patients who may be weak or dizzy.
   Provide adequate assistance for weak patients.

5. Check temperatures of solutions used for treatment.
   Check skin when heat is applied as a treatment.
   Position patient's tray so hot liquids will not spill.
   Assist patients with hot liquids of they cannot handle them alone.
   Monitor smoking.
   Take precautions when oxygen is in use.

6. Place patient in upright position when giving food or fluids .
   Give small bites.
   Allow time for swallowing.
   Check nasogastric tube placement before instilling liquid.
   Position unconscious patient on side for oral hygiene.
   Do not leave weak patients or small children alone in bathtub.

7. Keep all poisonous substances away from food or medications.
   Avoid aerosol sprays in the presence of food or liquids.
   Keep hazardous materials in labeled containers.
   Keep labels clean and legible.
   Store medication in locked area.
   Allow only adequately trained person to administer medications.

8. Have all patients wear identification bands.
   Check identification bands before administering medication or treatments.
   Verify any orders or instructions which are questionable.

9. Any secretions or excretion of the body
   - Saliva
   - Mucus
   - Urine
   - Feces
   - Wound drainage
   - Blood

10. Dirty bed linen
    Soiled dressings
    Used needles and syringes
    Catheters which have been removed
    Bedpans

11. Wash hands before, during and after patient care.
    Provide thorough personal hygiene measures for the patient.
    Handle equipment and supplies carefully.
    Clean all equipment thoroughly.
    Dispose of waste and used supplies correctly.
    Follow all infection control measures of the health care facility.

ASSIGNMENT SHEET 2

Part 1

1. Clinitest
2. Urine sugar testing
3. Poison: Causes Severe Burns
4. Do not induce vomiting
   Drink large quantities of water or milk
   Call physician immediately
5. Explosion

Part 2

1. Hand washing
2. Sani-Fresh International
   San Antonio, TX 78218
3. Seek professional assistance or contact a Poison Control Center immediately

Part 3 Fire

Part 4

1. Wear gloves to empty the urine
2. Do not pour out contents. Place canister with fluid inside a plastic bag, tie shut and place in trash container.
3. Place in plastic lined trash can.
4. Do not re-cap. Place in sharps disposal unit.
5. Take out plastic liner, tie closed, and place in larger trash can.
6. Throw it away.

ASSIGNMENT SHEET 3

Check that student has completed the form and filled it out accurately.

Check for legible writing, clear expression, and sufficient detail.

OBJECTIVE 13a

Participate in a fire/tornado/bomb threat evacuation drill.

PROCEDURE

1. Begin movement immediately when the warning is sounded.
2. Walk quickly, but do not run.
3. Assist anyone needing assistance.
4. **For fire and bomb threat:**
    a. Close windows and turn out lights (as institutional policy dictates)
    b. Close doors when all have exited an area. Include doors of unoccupied rooms.
    c. Follow evacuation route to exit and proceed to group gathering place. If the primary exit is blocked, quickly and quietly proceed to secondary exit.
5. **For tornado:**
    a. Move quickly and quietly to shelter area on lowest level and in the interior of the building away from glass and outside openings.
    b. Protect head and face with hands and arms to minimize injury from flying objects.
6. Answer to roll call.
7. Remain in designated area until the signal is given to return.

Functional Reading Skills
- Follow written instructions

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safe procedures/practices
- Practice good work habits/attitudes
- Deal effectively with customers/clients

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PRACTICE SAFETY PROCEDURES

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  — Following written instructions

  EMPLOYABILITY SKILLS

  — Mastering a specific job task/procedure

  — Applying safety practices/procedures

  — Practicing good work habits/attitudes

  — Dealing effectively with client/customer

- If students have difficulty following written instructions:

  — Discuss the possible consequences of not following instruction precisely.

  — Have them read the instructions several times, noting the key words and ideas.

- If students have difficulty applying safety practices/procedures:

  — Review the reasons for, and importance of, safety procedures. Review the safety practices relevant to the procedure.

- If students have difficulty dealing effectively with client/customer, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- For additional suggestions on teaching basic skills, refer to Instructional Supplement for Assignment Sheet 2.

JOB SHEET 2 — PRACTICE SAFETY PROCEDURES II

OBJECTIVE 13b

Use proper body mechanics.

EQUIPMENT AND SUPPLIES

- Hospital bed
- Overbed table
- Object for lifting
- Object for reaching

PROCEDURE

Functional Reading Skills
- Follow written instructions

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safe procedures/practices
- Practice good work habits/attitudes

Standing

1. Stand erect with arms close to sides and hanging straight down.
2. Hold head erect, shoulders back, and chest slightly out.
3. Pull up buttocks and hold in abdomen.
4. Have knees slightly flexed.
5. Point toes forward with feet slightly apart for a broad base of support.

Sitting

1. Stand close to chair and place a foot under it to broaden base of support

   NOTE: It is a good practice to feel the chair against the back of the leg to be sure of its position.

2. Lower body and shift weight of trunk towards the back.
3. Hold the vertebrae as straight as possible.
4. Rest feet flat on floor.

   NOTE: If needed, place a firm cushion on the chair to correct any undesired slant, causing the body to slide forward or backward.

5. Make sure that the chair is high or low enough so that the feet can rest flat on the floor.

6. Sit with one foot forward to add stability, especially when moving toward a desk.

Bending and lifting

1. Lower body toward floor by bending the hips and knees

   NOTE: The back should be straight.

2. Position the body directly in front of the object to be lifting.

3. Place feet slightly apart to provide a wide base of support for good balance.

4. Hold object with both hands.

5. Use leg muscles to lift item from floor to waist level.

   NOTE: Back should remain straight.

6. Avoid any twisting movements of back.

7. Carry object close to body.

Reaching for an object

1. Stand close to object with both feet flat on floor.

   NOTE: Use a ladder or step stool if necessary to get close enough to the object to keep both feet flat on a firm surface.

2. Extend both arms to reach object.

3. Keep back straight.

4. Bring object to waist level using arm muscles.

   NOTE: Use care in descending if a ladder or step stool is used.

5. Avoid any twisting movements of back.

6. Carry object close to body.

Adjusting hospital bed to comfortable working level.

1. Take position at point of control for bed.
2. Lower body toward floor by bending knees.
3. Keep back straight.
4. Locate controlling device on bed which adjusts bed height.
5. Adjust bed upward from floor.

   NOTE: Do not twist back.
6. Use leg muscles to rise to standing position.
7. Check for correct bed height for comfortable working conditions.

   NOTE: This should be at about or just below waist level.

Adjusting overbed table to comfortable working height.

NOTE: The positioning mechanisms on overbed tables vary according to the model. Follow directions for the type in use.

1. Stand in front of overbed table facing positioning mechanism.
2. Keep both feet flat on floor and slightly apart for broad base of support.
3. Follow directions to adjust height, keeping back straight.

   NOTE: Avoid any twisting movements.
4. Check height for comfortable working level.

   NOTE: This should be at about waist level.

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PRACTICE SAFETY PROCEDURES

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  — Following written instructions

  EMPLOYABILITY SKILLS

  — Mastering a specific job task/procedure

  — Applying safety practices/procedures

  — Practicing good work habits/attitudes

- For additional suggestions on teaching basic skills, refer to Instructional Supplement for Assignment Sheet 2 and Job Sheet 1.

JOB SHEET 3

PRACTICE SAFETY PROCEDURES

OBJECTIVE 13c

Complete requirements for CPR and First Aid course.

NOTE: Your instructor will help you arrange for instruction through CPR and First Aid courses to meet this requirement.

Functional Reading Skills
- Follow written instructions

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral instructions
- Communicate with professional colleagues/associates

General Relating Skills
- Interact with professional colleagues/associates

Job Acquisition/Development Skills
- Master specific job task/procedures
- Apply safety procedures/practices
- Practice good work habits/attitudes

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BASIC SKILLS

PRACTICE SAFETY PROCEDURES

II

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

  READING SKILLS

  - Following written instructions

  ORAL COMMUNICATION SKILLS

  - Applying active listening skills
  - Giving/following oral directions
  - Communicating with professional colleagues/associates

  INTERPERSONAL/RELATING SKILLS

  - Interacting with professional colleagues/associates

  EMPLOYABILITY SKILLS

  - Mastering a specific job task/procedure
  - Applying safety practices/procedures
  - Practicing good work habits/attitudes

- If students have difficulty giving/following oral directions:

  - Remind them that watching the speaker enhances listening.

  - Stress concentration and focusing on the present event.
  - Review listening skills.

- If students have difficulty communicating or interacting with professional colleagues/associates:
  - Review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication.
  - Remind them that professionals are a source of help and information.

- For additional suggestions on teaching basic skills, refer to Instructional Supplements for Assignment Sheets 1 and 2, Job Sheet 1.

PRACTICE SAFETY PROCEDURES

JOB SHEET 1

Participate in a fire/tornado/bomb threat evaluation drill.

Student's Name ____________________ Date ________

Evaluator's Name ____________________ Attempt No. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Processing Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Write a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student:	Yes	No
1. Began movement immediately when warning was sounded.	______	______
2. Walked quickly.	______	______
3. Assisted anyone needing assistance.	______	______
4. For fire and bomb threat:		
a. Closed windows and turned out lights.	______	______
b. Closed doors after all had exited area.	______	______
c. Followed evaluation route to exit and proceeded to group gathering place.	______	______
5. For tornado:		
a. Moved quickly and quietly to shelter area.	______	______

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	YES	NO
b. Protected head and face with hands and arms.	______	______
6. Answered roll call.	______	______
7. Remained in designated area until signal was given.	______	______

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria:				
	4	3	2	1
Exited building safely for fire/bomb threat drill.				
	4	3	2	1
Reached gathering point/designated shelter area in appropriate length of time for facility				

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation", divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 2

PRACTICE SAFETY PROCEDURES

JOB SHEET 2

Use proper body mechanics.

Student's Name ____________________ Date ______________

Evaluator's Name ____________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Processing Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Write a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student:	Yes	No
Standing		
1. Stood erect with arms close to sides and hanging straight down.	______	______
2. Held head erect, shoulders back and chest slightly out.	______	______
3. Pulled up buttocks and held in abdomen.	______	______
4. Had knees slightly flexed.	______	______
5. Pointed toes forward with feet slightly apart.	______	______
Sitting		
1. Stood close to chair and placed a foot under it to broaden base of support.	______	______
2. Lowered body and shifted weight of trunk towards the back.	______	______
3. Held the vertebrae as straight as possible.	______	______

	Yes	No
4. Rested feet flat on floor.	______	______
5. Made sure that the chair was high or low enough so that the feet could rest flat on the floor.	______	______
6. Sat with one foot forward.	______	______

Bending and lifting

1. Lowered body toward floor by bending the hips and knees.	______	______
2. Positioned the body directly in front of and facing the object to be lifted.	______	______
3. Placed feet slightly apart to provide a wide base of support for good balance.	______	______
4. Held object with both hands.	______	______
5. Used leg muscles to lift item from floor to waist level.	______	______
6. Avoided any twisting movements of back.	______	______
7. Carried object close to body.	______	______

Reaching for an object

1. Stood close to object with both feet flat on the floor.	______	______
2. Extended both arms to reach object.	______	______
3. Kept back straight.	______	______
4. Brought object to waist level using arm muscles.	______	______
5. Avoided any twisting movements of back.	______	______
6. Carried object close to body.	______	______

	Yes	No
Adjusting hospital bed to comfortable working level.		
1. Took position at point of control for bed.	______	______
2. Lowered body toward floor by bending knees.	______	______
3. Kept back straight.	______	______
4. Located controlling device on bed which adjusts bed height.	______	______
5. Adjusted bed upward from floor.	______	______
6. Used leg muscles to rise to standing position.	______	______
7. Checked for correct bed height for comfortable working conditions.	______	______
Adjusting overbed table to comfortable working height.		
1. Stood in front of overbed table facing positioning mechanism.	______	______
2. Kept both feet flat on floor and slightly apart for broad base of support.	______	______
3. Followed directions to adjust height, keeping back straight.	______	______
4. Checked height for comfortable working level.	______	______

EVALUATOR'S COMMENTS ____

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria:

Demonstrated appropriate body mechanics for: — Standing	4	3	2	1
— Sitting	4	3	2	1
— Bending and lifting	4	3	2	1
— Reaching for an object	4	3	2	1
— Adjusting hospital bed to comfortable working level	4	3	2	1
— Adjusting overbed table to comfortable working height	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING	**Evaluator Note:** To obtain an average rating for the competency profile, total the designated points in "Product Evaluation", divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.
PERFORMANCE EVALUATION KEY	4 — Skilled — Can perform job with no additional training. 3 — Moderately skilled — Has performed job during training program; limited additional training may be required. 2 — Limited skill — Has performed job during training program; additional training is required to develop skill. 1 — Unskilled — Is familiar with process, but is unable to perform job.
AVERAGE RATING	(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

__________ ____________________
(Date) (Evaluator's Signature)

____
(Evaluator's Position)

PRACTICE SAFETY PROCEDURES

JOB SHEET 3

Complete requirements for CPR and First Aid course.

Student's Name ____________________ Date ______________

Evaluator's Name ___________________ Attempt No. _________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Processing Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Write a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student:	Yes	No
1. Enrolled in a CPR course.	______	______
2. Completed CPR course satisfactorily.	______	______
3. Enrolled in a First Aid course.	______	______
4. Completed First Aid course satisfactorily.	______	______

EVALUATOR'S COMMENTS

____

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria:				
Have current CPR card	4	3	2	1
Have current First Aid card	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation", divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date) (Evaluator's Signature)

(Evaluator's Position)

WRITTEN TEST

PRACTICE SAFETY PROCEDURES II

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with safety practices and procedures to their correct definitions. Write the letter of the correct term in the blank.

Part 1

______1. To introduce a harmful substance

______2. A substance that can have harmful effects, including death

______3. Detailed information about chemical products supplied by the manufacturer

______4. A record completed after an unusual occurrence that describes what happened and the steps taken after the occurrence

______5. A round structure composed of cartilage that lies between the vertebrae

______6. Lack of oxygen in the body that might be caused by choking, strangulation, or drowning

______7. Capable of causing injury

______8. Contact of an object against the surface on which it rests

a. Alignment
b. Asphyxiation
c. Balance
d. Base of Support
e. Body Mechanics
f. Center of Gravity
g. Chemical Information List
h. Contaminate
i. Disc
j. Hazard Communication Standard
k. Hazardous
l. Incident report
m. Line of gravity
n. Material Safety Data Sheets
o. OSHA
p. Poison

Part 2

______1. The 33 small bones making up the spinal column

______2. An imaginary vertical line that passes through the center of gravity

______3. Twisting column of high wind accompanied by a funnel-shaped cloud

______4. Occupational Safety and Health Administration

______5. Alignment and position of the body

______6. A living thing capable of producing disease

______7. Used to describe communication to employees concerning chemical hazards in the work place

a. Hurricane

b. Line of gravity

c. MSDS

d. OSHA

e. Pathogenic organism

f. Poison

g. Posture

h. Right to Know

i. Tornado

j. Vertebrae

Part 3

______1. Federal guidelines concerning employers' responsibility in informing workers of chemical hazards in the work place

______2. The position of body parts in relation to one another

______3. Ability to maintain position

______4. Area in the body where mass is centered

______5. A listing of all potentially hazardous chemicals found in the area

a. Accident report

b. Alignment

c. Balance

d. Base of support

e. Body mechanics

f. Center of gravity

g. Chemical information list (CIL)

______6. Use of the body to maintain balance and achieve motion

______7. A written report made to record the circumstances surrounding an unexpected event and the actions taken after the event

h. Hazard Communication Standard

i. Poison

OBJECTIVE 2

Select true statements about the advantages of practicing good body mechanics. Write an "X" in the blank before each true statement.

______1. Good posture when standing improves balance.

______2. A narrow base of support makes it easier to stand for long periods of time.

______3. Using the back muscles is safer than using other muscle groups.

______4. Good body mechanics could prevent pressure on nerves and blood vessels.

______5. Jerking movements during lifting improve efficiency.

______6. Resting more weight on one foot when standing for long periods of time demonstrates proper application of good body mechanics.

______7. Balance is more stable when the base of support is broad and the line of gravity passes through the center of gravity and near the middle of the base of support.

______8. Balance is more stable when the base of support is high.

______9. Repositioning a patient in bed with the siderails in place demonstrates proper application of good body mechanics.

OBJECTIVE 3

List components of a safe school and work environment. List five components.

1. ______________________________

2. ______________________________

3. ______________________________

4. ______________________________

5. ______________________________

OBJECTIVE 4

Select effective procedures to follow in the classroom or clinical area in case of fire or tornado. Write an "X" in the blank before effective procedures.

______1. Leave doors open for easy evacuation during a fire.

______2. Use a type D fire extinguisher for paper fires.

______3. Activate the alarm system as soon as people are removed from immediate danger.

______4. Replace fire extinguishers promptly after use.

______5. Avoid the use of elevators during a fire.

______6. A place in an interior hallway away from doors and windows, would be a safe shelter during a tornado.

______7. Windows should be closed for fires.

______8. The hospital basement, away from doors and windows, would be a safe shelter in a tornado.

______9. During evacuation of a burning building, crawl along the floor in areas of smoke.

_____10. Use a type A fire extinguisher for burning grease fires.

_____11. When a fire extinguisher is used, the nozzle should be pointed at the tip of the flames.

_____12. Before a fire extinguisher is used, the pin at the top must be pulled.

_____13. In a tornado, each patient should be supplied with extra blankets.

_____14. In a fire and a tornado, oxygen must be turned off and nurses should be prepared to ventilate patients manually.

OBJECTIVE 5

Select appropriate actions to take in case of a bomb threat.
Write an "X" in the blank before appropriate actions.

______1. The person receiving the call should hang up as soon as possible when a bomb threat is received.

______2. Evacuation is not necessary during a bomb threat.

______3. Someone familiar with the area should assist the police with a bomb search.

______4. All containers are thoroughly searched during a bomb search.

______5. The person receiving the call should note the sex and approximate age of the caller.

______6. The person receiving the call should note the environmental sounds in the background of the caller.

______7. Only the police should be involved in a bomb search since they know the right kind of thing to look for.

______8. Only dogs trained in sniffing out explosives should participate in a bomb search.

OBJECTIVE 6

Select the best word or phrase to complete statements about hazardous materials. Write the letter of the correct answer in the blank.

______1. An employee would find the most complete information about a chemical used at work ______.

a. on the chemical information list
b. on the MSDS
c. on the label
d. in the Hazard Communication Standard

______2. The body fluid which is considered the most hazardous is ______.

a. Blood
b. Saliva
c. Urine
d. Feces

______3. If a diamond-shaped warning symbol were displayed on a product with a 0 on a blue field, this would mean that ______.

a. no hazards exist with this product
b. no health hazard exists with this product
c. no reactivity hazard exists with this product
d. no information is available concerning possible hazards with this product

______4. The material contacted during patient care that would probably present the greatest hazard is ______.

a. a urinary catheter after removal
b. linens soiled during a bowel movement
c. a food tray from which the patient has eaten
d. packing material after use for a nose bleed

______5. The OSHA Hazard Communication Standard concerns informing employees about ______.

a. fire danger
b. chemical products
c. unsafe weather conditions
d. radiation hazards

______6. The diamond-shaped warning label found on some products is meant to ______.

a. indicate extreme flammability
b. communicate first-aid measures
c. replace other labeling
d. serve as a quick reference

______7. The nurse caring for a patient receiving oxygen must be aware of hazards involved with ______.

a. flammable gases
b. chemotherapy agents
c. cleaning agents
d. radioactive substances

______8. Employees assisting with diagnostic testing may be especially at risk for hazards connected with ______.

a. falls
b. poisoning
c. radiation
d. back injury

OBJECTIVE 7

Discuss the proper use of equipment and materials for handling hazardous wastes. Read the scenario and write the answers to the questions in the space provided.

Tom Wells is a licensed practical nurse working in a hospital. During one of his work days, here are some of the activities he carries out.

Giving oral medications
Giving injections
Performing nasopharyngeal suctioning
Assisting with starting IV fluids
Feeding patients
Assisting patient with bowel and bladder elimination including emptying bedpans and urinals
Changing wound dressings
Assisting patients with ambulation

Consider his activities in answering the following questions.

1. During what activities would he need to protect himself from body fluids? ______________________________

   How could he protect himself? ______________________

   ____

   ____

2. When would it be advisable for him to consider wearing goggles?

   ____

   ____

3. How would he dispose of used needles and syringes?

   ____

   ____

   ____

OBJECTIVE 8

Select from a list appropriate actions to take to ensure the patient's safety. Write an "X" in the blank before each appropriate action.

______1. The nurse should encourage the ambulatory patient to wear warm socks when walking.

______2. The doctor has ordered a new medication for a patient. The nurse is worried that the amount ordered may be too large a dose for the patient. Her best course of action would be to check with another nurse for another opinion.

______3. The patient receiving oxygen has brought an electric razor from home. The nurse should allow him to use it after checking for frayed cords.

______4. To prevent poisoning, the nurse should store the patient's medications at the bedside.

______5. Unconscious patients should be positioned on their sides to prevent asphyxiation.

______6. The nurse should call the housekeeping department to wipe up all spills.

______7. The nurse can help prevent falls by providing patients with a night light.

______8. Nurses can control the spread of pathogens by washing their hands before, during, and after patient care.

______9. The nurse should keep gatch handles on bed out for easy access.

_____10. When assisting the patient with meals, the nurse should position the patient's tray so hot liquids will not spill.

_____11. The nurse should make sure all patients wear identification bands.

_____12. To have supplies readily accessible, the nurse should store equipment in the hallway whenever possible.

OBJECTIVE 9

Arrange in order the steps for handling an incident or error involving self or others. Write a "1" in the blank before the first step, a "2" before the second step, and so on.

______1. Observe the victim carefully to determine injuries.

______2. Enter a thorough account of the events in the patient's chart.

______3. Call the doctor.

______4. Complete a incident report.

NOTICE

The following assignment sheets and job sheets are not part of the Written Test. If they have not been completed, check with your instructor.

OBJECTIVE 10

Maintain a safe school and working environment. SCORE ______

OBJECTIVE 11 **Use proper handling and disposal techniques for hazardous materials.** SCORE ______

OBJECTIVE 12 **Document an incident on the appropriate form.** SCORE ______

OBJECTIVE 13 **Demonstrate the ability to**

a. Participate in a fire/tornado/bomb threat evacuation drill. RATING ______

b. Use proper body mechanics. RATING ______

c. Complete requirements for CPR and First Aid course. RATING ______

WRITTEN TEST ANSWERS

PRACTICE SAFETY PROCEDURES

II

OBJECTIVE 1

	Part 1	Part 2	Part 3
1.	h	j	h
2.	p	b	b
3.	n	i	c
4.	l	d	f
5.	i	g	g
6.	b	e	e
7.	k	h	a
8.	d		

OBJECTIVE 2

1, 4, 7

OBJECTIVE 3

Answer may include any five of the following:

- Clean air without harmful fumes to breathe.
- Adequate lighting to prevent eyestrain and allow us to perform our tasks adequately and safely
- Comfortable and safe noise level
- Seating that supports the natural curves of the body and encourages good body mechanics
- Adequate, clean restroom facilities
- Barrier free walkways in good repair
- Clearly marked exits
- Emergency exits unlocked and freely accessible
- Emergency evacuation routes posted
- Fire extinguishers readily available
- Hazardous materials clearly identified
- Adequate storage facilities for hazardous materials
- Protective gear available for use when necessary
- An effective alarm or notification system for emergency situations
- Safety rules posted
- Training in safety procedures

OBJECTIVE 4

3, 5, 6, 7, 8, 9, 12, 13, 14

OBJECTIVE 5

3, 5, 6

OBJECTIVE 6

1. b
2. a
3. b
4. d
5. b
6. d
7. a
8. c

OBJECTIVE 7

1. Suctioning, Assisting with IV, Emptying bedpan and urinal, changing dressing

   Wear gloves

2. Suctioning, Assisting with IV — Whenever there is a possibility of splattering

3. Needles and syringes should be placed in a sharps container without recapping

OBJECTIVE 8

5, 7, 8, 10, 11

OBJECTIVE 9

1. 1
2. 3
3. 2
4. 4

OBJECTIVE 10

Refer to answers to Assignment Sheet 1.

OBJECTIVE 11

Refer to answers to Assignment Sheet 2.

OBJECTIVE 12

Refer to answers to Assignment Sheet 3.

OBJECTIVE 13

Refer to practical test ratings for Job Sheets 1-3.

OBJECTIVE SHEET

USE THE NURSING PROCESS FOR CARE PLANNING

III

INTRODUCTION

Nursing education and nursing practice are both built upon the framework of a concept called the "nursing process". As an essential part of the health care team and a nursing care provider, it is important for the practical nurse to understand the nursing process.

The nursing process is a systematic, organized approach to problem solving that provides the framework for giving individualized care to each patient. The nursing process contains five distinct steps: assessment, analysis, planning, implementation, and evaluation.

The nursing process is patient centered and establishes a structure for providing nursing care with a human needs approach that is directed at a range of human problems, not just the current medical diagnosis. The nursing process helps to focus patient care toward the promotion of wellness. Through this process, the patient and nurse work together to resolve problems and assist the patient to maintain an optimal level of health.

The written care plan serves as a working tool for communication among members of the health care team to provide consistency and continuity of nursing care.

UNIT OBJECTIVE

After completing this unit, the student will be able to identify the five steps of the nursing process and be able to apply the nursing process to assist in providing health care to patients in the clinical setting. The student will demonstrate these competencies by completing assignment sheets and the written test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with the nursing process to their correct definitions.
2. List the steps of the nursing process.
3. Select the correct word or phrase to complete statements about the nursing process.

4. List the five levels of needs in Maslow's model, from lowest or most immediate to highest.

5. Prioritize patient problems using Maslow's hierarchy and other categories of human functions.

6. Distinguish between medical and nursing diagnoses.

7. Distinguish between correctly and incorrectly stated patient care goals.

8. Select true statements about the importance of nursing care plans.

9. Label the nursing process steps associated with guidelines for giving self-help instructions to patients.

10. Select the best word or phrase to complete statements about the nurse's role in admission, discharge, and transfer of patients.

11. Match components of the decision-making/problem-solving process to the steps of the nursing process.

12. Match the steps of the decision-making process with the appropriate behavior for each step.

13. Match options involved in decision making with appropriate risks.

14. Evaluate specific nursing actions in terms of the nursing process. (Assignment Sheet 1)

15. Organize a teaching plan. (Assignment Sheet 2)

16. Use a hospital admission form to begin the admission process. (Assignment Sheet 3)

17. Inventory and store patient's possessions. (Assignment Sheet 4)

18. Apply the brainstorming process. (Assignment Sheet 5)

SUGGESTED ACTIVITIES

USE THE NURSING PROCESS FOR CARE PLANNING

III

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
  - Assist students to conduct a chapter service project on decision making.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
  - Plan community or school health project that involves disseminating pamphlets about decision making.

DELIVERY

- Discuss unit objectives.

Objective 1

- Discuss terms concerned with the Nursing Process.
- Have students work crossword puzzle in Activity Sheet 1 dealing with terms.

Objective 2 and 3

- Discuss steps of the Nursing Process.

- Have students complete Activity Sheet 2, "Use Steps of the Nursing Process to Solve a Problem."

- Have the students list problems in their lives. Choose some common problems and use Activity Sheet 3, "Apply the Nursing Process," to work through some.

- Give students different sets of directions to make the same thing such as a recipe or instructions for a craft item. Encourage students to follow instructions precisely, which should cause some products to turn out poorly. Then use the steps of the Nursing Process to assess the products, analyze the problem, plan how to correct it, intervene and evaluate.

- Show video, *Nursing Process*.

- Use Transparency Masters 1 through 5.

Objective 4 and 5

- Discuss methods of prioritizing patient care.

- Have students complete Activity Sheet 4, "Identify Needs."

Objective 6

- Discuss medical and nursing diagnoses.

- Have students complete Activity Sheet 5, "Distinguish Between Medical and Nursing Diagnoses."

Objective 7

- Discuss patient care objectives.

- Have students complete Activity Sheet 6, "Recognize Patient Goals."

Objective 8

- Discuss nursing care plans.

- Provide examples of nursing care plans used in local health care facilities.

- Provide examples of standardized care plans and discuss how they would be individualized.

Objective 9

- Discuss steps of the nursing process used in giving self-care instructions.

- Have students apply steps to some topic in which they are knowledgeable.

Objective 10

- Discuss the nurse's role in admission, discharge, and transfer of patients.

- Provide appropriate forms from local health care institutions.

- Provide students with information that would be supplied during admission to clinical facilities.

- Ask students to share experiences they or family members have had in being admitted, transferred, or discharged in medical facilities.

- Show video, *Admission and Discharge.*

Objective 11

- Discuss components of the decision-making/problem-solving process.

- Have students apply the Problem Solving Method to problems they generated in Objective 2.

- Show video, *Creative Problem Solving.*

Objective 12

- Discuss factors which influence decision making.

- Have students practice decision making on a variety of problems.

Objective 13

- Discuss risks involved in decision making.
- Have students identify possible outcomes of the different actions possible in any given problem.
- If students have not completed Activity Sheet 1, have them complete it now.

APPLICATION

Objectives 14 and 15

- Discuss Assignment Sheets 1 and 2.
- Have students complete Assignment Sheets 1 and 2.

Objective 16

- Discuss Assignment Sheet 3.
- Have students complete Assignment Sheet 3.
- Discuss the section of the admission form that practical nursing students would not complete. Point out basic observations to be made of patients which would add to this data.
- Show video, *Abnormal Signs and Symptoms*.

Objective 17

- Discuss Assignment Sheet 4.
- Provide items such as jewelry for the students to practice describing.
- Have students complete Assignment Sheet 4.

Objective 18

- Discuss Assignment Sheet 5.
- Let students suggest topics to be brainstormed.
- Have students complete Assignment Sheet 5.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities and job sheets if not previously completed.
- Reteach and retest if necessary.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Nursing Process,* 17 minutes. Concept Media
- *Creative Problem Solving,* 15 minutes. Concept Media
- *Abnormal Signs and Symptoms,* 10 minutes. MEDCOM, Nursing Assistant Techniques Series.
- *Admission and Discharge,* MEDCOM.

Publications

- Bodtke, Susan, Jeanie Meyer, Hilda Smith, and Lola Wilmes. *Solving the Nursing Process Puzzle: A Student Guide.* Nurse Science Department of Oklahoma State University Technical Branch, Oklahoma City, 1989.

UNIT REFERENCES

- *Assessment.* Springhouse Corporation, Springhouse, Pennsylvania, 1983.
- Atkinson, Leslie D. and Mary Ellen Murray. *Understanding the Nursing Process* (3rd ed.). Macmillan Publishing Co., Inc., New York, 1986.
- Atkinson, Leslie D. and Mary Ellen Murray. *Understanding the Nursing Process* (2nd ed.). Macmillan Publishing Co., Inc., New York, 1980.
- Bodtke, Susan, Jeanie Meyer, Hilda Smith, and Lola Wilmes. *Solving the Nursing Process Puzzle: A Student Guide.* Nurse Science Department of Oklahoma State University Technical Branch, Oklahoma City, Oklahoma, 1989.
- Brill, Esther Levine and Dawn F. Kilts. *Foundations for Nursing* (2nd ed.). Appleton-Century-Crofts, Norwalk, Connecticut, 1986.
- Carpenito, Lynda Juall. *Nursing Diagnosis, Application to Clinical Practice* (2nd ed.). J. B. Lippincott Company, Philadelphia, Pennsylvania, 1987.
- Carpenito, Lynda Jaull and T. Audean Duespohl. *A Guide for Effective Clinical Instruction* (2nd ed.). Aspen Systems Corporation, Rockville, Maryland, 1985.
- Doenges, Marilyn and Mary Moorhouse. *Nursing Diagnoses with Interventions* (2nd ed.). F.A. Davis Company, Philadelphia, Pennsylvania, 1988.
- Griffith-Kenney, Janet W. and Paula J. Christensen. *Nursing Process, Application and Theories, Frameworks, and Models* (2nd ed.). The C.V. Mosby Company, St. Louis, Missouri, 1986.

- Hawley, Robert C. and Elizabeth L. *A Handbook of Personal Growth Activities for Classroom Use.* Education Research Associates, Amherst, Massachusetts.

- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures* (3rd ed.). Addison-Wesley Publishing Company, Menlo Park, California, 1987

- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed.). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.

- "NANDA Nursing Diagnosis Newsletter," Summer 1988, St. Louis, Missouri.

- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice.* The C.V. Mosby Company, St. Louis, Missouri, 1987.

- Sundberg, Mary C. *Fundamentals of Nursing.* Jones and Bartlett Publishers, Inc., Boston/Monterey, 1986.

- Taylor, Cynthia M. Loxley and Sheila S. Cress. *Nursing Diagnosis Cards.* Springhouse Corporation, Springhouse, Pennsylvania, 1986.

- Tribulski, Jean A. "Nursing Diagnosis: Waste of Time or Valued Tool?" *RN*, December, 1988.

OBJECTIVE 1

Match terms associated with the nursing process to their correct definitions.

- **Activities of daily living (ADL)** — Function normally carried out by an individual
- **Admission** — The process of entering a health care institution
- **Against medical advice (AMA)** — Leaving a health care institution without the order of a physician
- **Analysis** — Interpretation of a problem
- **Assessment** — Gathering information
- **Brainstorm** — Generation of ideas by a group working together
- **Care plan** — A document developed to guide patient care
- **Choice** — In decision making, the step where a course of action is decided upon
- **Data base** — A body of information collected by interview, physical assessment, and review of diagnostic data upon admission to a health care institution
- **Deliberation** — In decision making, the act of gathering data about a decision to be made
- **Diagnosis** — Naming a problem
- **Documentation** — Recording information
- **Evaluation** — Judging of an outcome
- **Expected outcome** — That which is expected to occur
- **Functional health patterns** — Arrangement of health problems by human functions
- **Goal** — That which is expected to occur

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- **Implementation** — Putting a plan into action
- **Intervention** — Putting a plan into action
- **Interview** — Gathering information by talking with someone
- **Judgement** — In decision making, the act of weighing alternatives against desired outcomes
- **Long-term goal** — That which is expected to occur after a considerable period of time
- **Maslow's Hierarchy of Needs** — A model developed by Abraham Maslow to describe human needs
- **Medical diagnosis** — The name of a medical problem as determined by a physician
- **Need** — That which is necessary for survival
- **Nursing diagnosis** — The name of a nursing problem that can be resolved by nursing measures
- **Nursing history** — Information about past and present health problems and activities of daily living gathered by patient interview
- **Nursing orders** — Statements to direct nursing care
- **Nursing process** — A means of determining needed care, delivering that care and evaluating the effects
- **Objective** — That which is expected to occur
- **Objective data** — Information obtained by observations of an examiner
- **Physiological** — Pertaining to functioning of the body
- **Planning** — Determining what is to be done
- **Prioritize** — To arrange in order of importance
- **Priority** — Relative importance

- **Problem** — A set of circumstances preventing a need from being met
- **Psychological** — Originating in the mind
- **Self-actualization** — Attaining one's full potential
- **Self-esteem** — Regard for one's self
- **Short-term goal** — That which is expected to occur in a short period of time
- **Subjective data** — Information obtained by listening to an account of the patient's experience
- **Transfer** — Process of being moved within or between health care institution(s)

OBJECTIVE 2

List the steps of the nursing process.

Let's consider a female as she decides "what to wear." She considers the weather, her plans for the day, and what is hanging in the closet. She comes to the conclusion that she needs something warm, comfortable, and yet rather dressy. Her decision is that a skirt and a sweater will be just the thing. She proceeds to put the outfit on and then steps in front of the mirror to see the effect. She has solved a problem.

In nursing our method for problem solving is called the nursing process. Our friend has solved her problem with steps similar to those used in nursing. She, first of all, gathered some data or *assessed* the situation. Then she *analyzed* her needs, *planned* what would be appropriate, *implemented* the plan and *evaluated* the outcome. We use similar steps in our everyday lives just as our friend did.

NURSING PROCESS STEPS

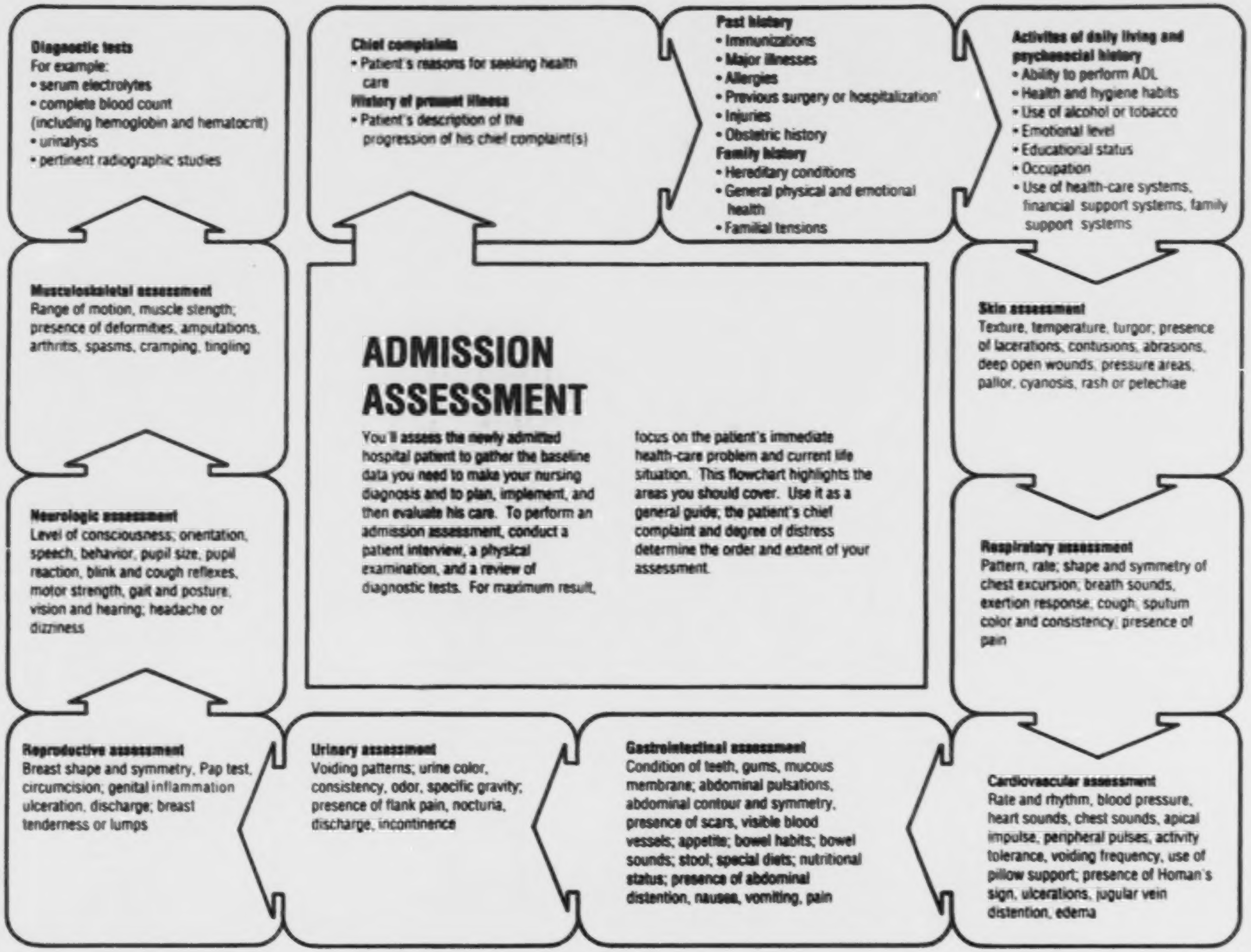
- **Assessment**
- **Analysis**
- **Planning**
- **Implementation**
- **Evaluation**

OBJECTIVE 3

Select the correct word or phrase to complete statements about the nursing process.

Assessment is the first step of the nursing process and serves as the basic platform for the other steps. Assessment is the collection of all available information pertaining to the patient. This step of the nursing process begins with the initial contact with the patient (admission), and is an on-going process. As the patient situation changes, new information becomes available and the plan of care may change. As the practical nurse provides care to a patient it is essential to remember that all information is important and that she will communicate data to other health care workers and assist in care planning each day.

Assessment involves gathering information in several ways to provide a data base. The data base is a body of information which will help us formulate diagnoses and plan care. When a patient first enters the health care system or institution it is important to gather as much information as possible so care will be complete and effective. The following illustration helps define three ways of gathering information. The first three compartments contain information gathered by interview. The following eight contain data obtained during physical assessment. The final compartment illustrates information from diagnostic data. All are important in compiling a data base.



ADMISSION ASSESSMENT

You'll assess the newly admitted hospital patient to gather the baseline data you need to make your nursing diagnosis and to plan, implement, and then evaluate his care. To perform an admission assessment, conduct a patient interview, a physical examination, and a review of diagnostic tests. For maximum result, focus on the patient's immediate health-care problem and current life situation. This flowchart highlights the areas you should cover. Use it as a general guide; the patient's chief complaint and degree of distress determine the order and extent of your assessment.

Chief complaints
- Patient's reasons for seeking health care

History of present illness
- Patient's description of the progression of his chief complaint(s)

Past history
- Immunizations
- Major illnesses
- Allergies
- Previous surgery or hospitalization
- Injuries
- Obstetric history

Family history
- Hereditary conditions
- General physical and emotional health
- Familial tensions

Activites of daily living and psychosocial history
- Ability to perform ADL
- Health and hygiene habits
- Use of alcohol or tobacco
- Emotional level
- Educational status
- Occupation
- Use of health-care systems, financial support systems, family support systems

Skin assessment
Texture, temperature, turgor; presence of lacerations, contusions, abrasions, deep open wounds, pressure areas, pallor, cyanosis, rash or petechiae

Respiratory assessment
Pattern, rate; shape and symmetry of chest excursion; breath sounds, exertion response, cough, sputum color and consistency; presence of pain

Cardiovascular assessment
Rate and rhythm, blood pressure, heart sounds, chest sounds, apical impulse, peripheral pulses, activity tolerance, voiding frequency, use of pillow support; presence of Homan's sign, ulcerations, jugular vein distention, edema

Gastrointestinal assessment
Condition of teeth, gums, mucous membrane; abdominal pulsations, abdominal contour and symmetry, presence of scars, visible blood vessels; appetite; bowel habits; bowel sounds; stool; special diets; nutritional status; presence of abdominal distention, nausea, vomiting, pain

Urinary assessment
Voiding patterns; urine color, consistency, odor, specific gravity; presence of flank pain, nocturia, discharge, incontinence

Reproductive assessment
Breast shape and symmetry, Pap test, circumcision; genital inflammation ulceration, discharge; breast tenderness or lumps

Neurologic assessment
Level of consciousness; orientation, speech, behavior, pupil size, pupil reaction, blink and cough reflexes, motor strength, gait and posture, vision and hearing; headache or dizziness

Musculoskeletal assessment
Range of motion, muscle stength; presence of deformities, amputations, arthritis, spasms, cramping, tingling

Diagnostic tests
For example:
- serum electrolytes
- complete blood count (including hemoglobin and hematocrit)
- urinalysis
- pertinent radiographic studies

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- *Physical assessment* or examination is one important way of gathering facts about the patient to add to the data base. Nurses must develop this skill.

- *Interviewing* patients or their family can provide much information which we need. The information which we obtain is called the *nursing history*. Communications skills become very important at this point in the assessment. Nurses must recognize the importance of both verbal and non-verbal communication in gathering data.

  Physicians also gain information in this manner, and when they do, they document it using terminology the nurse needs to recognize. The nurse is gathering much of the same information but in a different way.

  - The *chief complaint* is the patient's reason for seeking medical help.

  - The *history of present illness* are the presenting symptoms, the length of time they have persisted, and their effect.

  - The *past history* describes what other diseases or injuries the patient has had, including past hospitalizations, surgical procedures, and immunization status.

  - The *family history* reveals the possibility of any hereditary disorders.

  - The *psychosocial history* tells us who the patient lives with, what his educational and occupational status is, and reveals the presence of any family problems.

  - The *activities of daily living* describes to what extent the patient is able to care for himself, as well as health practices in relation to eating, use of alcohol and tobacco, and exercise.

    While nurses do not use precisely the same format, all this information is important to them and should be covered in the interview.

- *Diagnostic data* may also add to the data base. Such information as X-ray studies and laboratory tests can help the nurse understand patients and their problems more fully.

Analysis is the second step of the nursing process. It is normally the responsibility of a Registered Nurse. During this step all of the assessment data is organized and compared to "normal values" as presented in the text books. The practical nurse looks at the assessment data to identify any patient problems or basic needs that are not being met. The problems may be *actual* problems that the patient is currently experiencing. The problems may also be potential problems that the nurse recognizes may develop.

Knowing what is normal is very important. Information that the respiratory rate is 36 or that the hemoglobin is 10 does not mean anything unless the normals are known. By comparing the data for the individual patient to normal values or expectations, the nurse determines what *needs* and *problems* the patient has.

During analysis it is useful to organize the assessment data into groups. The nurse will begin to see that bits of information from the various sources fit together. For instance, the patient may relate that he has fallen and now has a pain in the right wrist. Physical assessment reveals swelling and deformity at the wrist. X-ray examination confirms that a bone is broken. From a nursing viewpoint, all this would mean that the patient has a problem with mobility. Other factors might fit in here too, but in analysis, a pattern has emerged and a problem that the nurse and patient must deal with has been named. For any one patient, a number of patterns or problems could be present.

The assessment data is carefully reviewed again to identify any factors contributing to the problems. In this way, the nursing diagnoses are developed. The nursing diagnosis is a statement that contains both the patient problem and the contributing factors., ie: pain related to surgical trauma to abdominal tissues; fear related to unknown results of biopsy. Our patient's problem could be immobility related to a broken wrist. See Supplements 1 and 2 for more information on nursing diagnoses.

Planning is the third step of the nursing process. During this step the nurse must organize and develop a plan of care to reduce the patient problems and promote wellness. In order to most effectively meet the needs of the patient, the list of nursing diagnoses must be prioritized, or ranked in order of importance. It would be more important to supply needed oxygen than to describe a planned diagnostic procedure. The next part of the plan is to develop the patient care goals or outcomes for each nursing diagnosis.

Patient care goals must be:

- Specific to the stated nursing diagnosis
- Patient centered
- Realistic for the patient
- Measurable

After patient care goals have been formulated, nursing orders are written to aid in meeting these goals. These are specific steps to be taken in meeting the goal. These will help all nurses dealing with the patient to work together to meet the goals identified. Such statements as "offer at least 100 cc of fluids every hour," assist patient to walk four times a day," "apply lotion to bony prominences twice a day" must be nursing orders.

Implementation or **Intervention** is the fourth step of the nursing process. During this step the practical nurse puts the plan into action by carrying out the nursing interventions identified in the planning stage. The nurse must be careful to individualize the approach to provide for comfort and safety for each patient.

As implementation takes place, the nurse will be observing or assessing the patient for his reaction to the nursing intervention. The nurse will also document or chart the fact that the nursing measures were performed and the patient's reaction to them. Nursing interventions could include such things as feeding a patient, taking vital signs, suctioning a tracheostomy, repositioning a patient, listening to a patient express his feelings, teaching a patient a new skill or the side-effects of a new medication, as well as hundreds of other actions.

Evaluation is the fifth step of the nursing process and is based on assessment data about the patient. During this step the practical nurse will determine if the patient care goals have been met. Reassessment of the patient is required to determine if the problems have been reduced or still exist. Will it be necessary to modify the care plan? If so, how? This reassessment and modification of the plan makes the nursing process cyclic.

It is important to realize that the nursing process is an ongoing, dynamic process. It is not something that takes place on admission to a hospital and is forgotten, but it continues throughout the patient's stay. Some problems will be resolved and others will be diagnosed. The nursing process is nursing's attempt to give the best possible individualized nursing care for each patient.

OBJECTIVE 4

List the five levels of needs in Maslow's model, from lowest or most immediate to highest.

A *need* is something that is necessary for life. Some needs must be met immediately in order for life to continue, such as the human body's need for oxygen. Others may wait for satisfaction. A *problem* is something that interferes with the need being met. A piece of food blocking the airway would be a problem interfering with the need for oxygen.

Abraham Maslow, a psychologist, developed his *Hierarchy of Human Needs* to explain this fact. Others have tried to explain these concepts in more detail. The following model illustrates Maslow's theory.

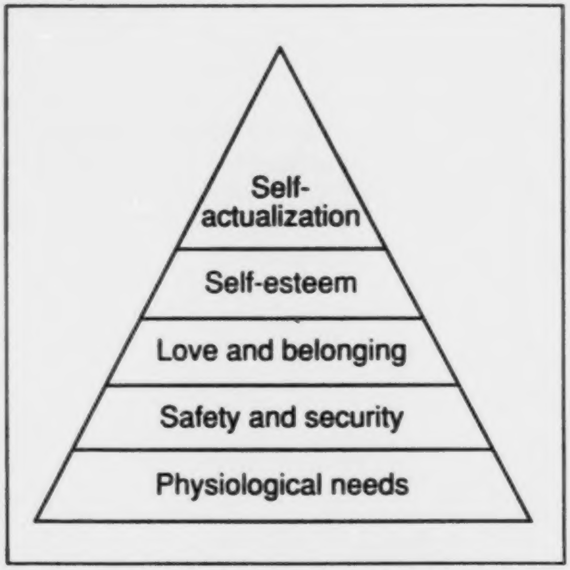

Figure 2* Hierarchy of Human Needs

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*Potter, Patricia A., and Perry, Anne G.: *Basic Nursing: Theory and Practice*, ed. 2, St. Louis, 1991, Mosby-Year Book, Inc.

The five levels of needs are:

1. Physiological needs — most immediate; must be met first
2. Safety and security
3. Love and belonging
4. Self-esteem
5. Self-actualization — highest need; this need cannot be met until all others are met.

OBJECTIVE 5

Prioritize patient problems using Maslow's hierarchy and other categories of human functions.

Using Maslow's Hierarchy of Human Needs as a model, nurses can *prioritize* or rank needs. Prioritizing helps the nurse decide which need must be met first.

1. **Physiological** — The physiological needs are those that must be met first for survival. Different writers may include different needs here, but the usual listing will include oxygen, fluids, food, temperature, elimination, rest, activity, pain avoidance, and sex. All of these are very definitely physical needs. The human body cannot survive without such things as oxygen or without fluids. These are needs which must be met immediately.

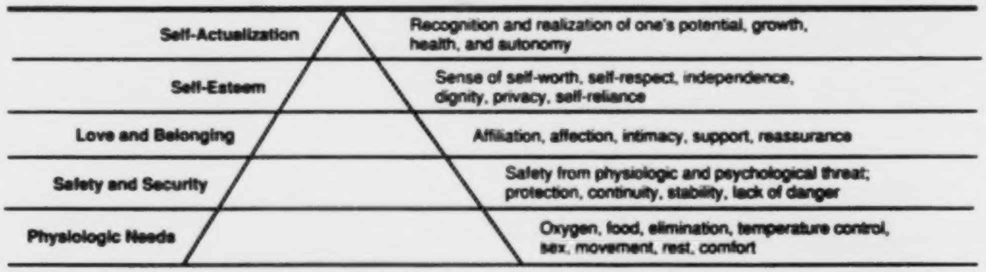
2. **Safety and security** — The second level of needs involves safety. These may be actual physical safety or protection needs or they may be psychological safety needs. The patient who is unsteady on his feet and needs help walking has a safety need. A patient with an open wound needs protection from infection. Psychological safety may involve fear of the hospital environment or of unknown procedures or outcomes.

3. **Love and belonging** — The third level of needs are those involving feelings of loving or being loved and of belonging to some group. When there are problems within the family unit, patients may bring this level of needs to the health care setting.

4. **Self-esteem** — Self-esteem involves the individual's feelings about himself, as well as the feelings he believes others have about him. Patients whose bodies undergo changes due to accidents, disease, surgical procedures, or aging may have needs in this area. People who have changes in roles or social position, such as losing a job, may also have problems.

5. **Self-actualization** — The highest level of human need according to Maslow, is self-actualization. The self-actualized person has met all lower needs and can handle problems easily. He may be involved in creative or self-improvement types of activities. These needs may be the hardest to identify. Probably much of the time in the health care setting, we are involved in meeting lower needs and do not recognize or deal with this type of need.

Maslow's Hierarchy of Needs


Self-Actualization
Recognition and realization of one's potential, growth, health, and autonomy
Self-Esteem
Sense of self-worth, self-respect, independence, dignity, privacy, self-reliance
Love and Belonging
Affiliation, affection, intimacy, support, reassurance
Safety and Security
Safety from physiologic and psychological threat; protection, continuity, stability, lack of danger
Physiologic Needs
Oxygen, food, elimination, temperature control, sex, movement, rest, comfort

Maslow has described a basic human needs' classification system that may assist you, the nurse, in providing holistic client care. To understand and resolve client problems, it is helpful to look at levels of need. While many of the problems clients have are physical in nature, the human being responds in a variety of ways to establish and maintain the self.

Maslow sets forth a hierachy of needs based on the premise that lower-level needs must be satisfied before a person can attend to higher-level needs. For nursing, this has special significance in decision making and planning for care. If a client is short of breath, he is probably not interested in, nor capable of, participating in a discussion about his spirituality. Similary, a client who is demanding frequent attention for a seemingly trivial matter may be exhibiting self-esteem needs. Need categories are not static, and you must be vigilant in assessment, planning, and intervention to meet the client's changing needs.

A brief schematic of Maslow's Hierarchy of Needs is presented above. Read the descriptions of the characteristics of each, and see how you would relate them to nursing diagnosis. On the other side of this card, we have outlined a categorization of nursing diagnoses according to this framework. It is helpful to assess clients for potential problems in all of the need categories. This serves as a check to ensure that you are looking at the client in a holistic manner.

Figure 3*

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*Reprinted with permission from *Nursing Diagnosis Cards*, Copyright 1986, Springhouse Corporation. All rights reserved.

People in the field of nursing have also devised frameworks based on human function that can be useful tools as assessment tools for organizing and prioritizing findings. See Supplement 3.

Marjory Gordon has identified eleven patterns in the following classification system.

Health-perception/Health management pattern	Includes information about the patient's view of his health, the actions the patient has used in the past while healthy or ill, and his feelings about how his health care should be managed.
Nutritional-metabolic pattern	Includes information about the patient's habits of eating and drinking: amounts, types, times, use of supplements, and physical characteristics that relate to the quantity and quality of food consumption.
Elimination pattern	Includes information about the patient's elimination of stool and urine. Some data would include the frequency, amounts, appearance, changes, and any use of medications or equipment that has been required.
Activity-exercise pattern	Includes information about the patient's daily routine, both work and recreation. Facts relating to what he is able to do, would like to do, and reasons for any differences between the two.
Cognitive-perceptual pattern	Includes information about the patient's use of language and his mental status. It also includes the patient's sensory abilities and the use of any artificial aids such as a hearing aid or glasses.

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*Reproduced by permission from Marjory Gordon, *Manual of Nursing Diagnosis*, St. Louis, 1982, The C.V. Mosby Company.

Sleep-rest pattern	Includes information about the patient's routine of sleep and inactivity. It would involve data related to the usual time for retiring and rising, and any customs or rituals the patient follows when preparing for sleep.
Self-perception/self-concept pattern	Includes information on the patient's attitudes about his personal strengths and weaknesses. Any behavior that correlates with this, such as speaking with confidence, would also be included.
Role-relationship pattern	Includes information on how the patient interprets his functions and responsibilities within the group of people who are significant to him. This may include relatives, friends, and co-workers.
Sexuality-reproductive pattern	Involves information about the patient's analysis of the adequacy or inadequacy of his sexual behavior. Also common reproductive information such as number of pregnancies, status of menstruation, and so on would be included.
Coping-stress-tolerance pattern	Involves information about the methods the patient uses when faced with problems and whether they assist him to a satisfactory outcome.
Value-belief pattern	Includes information on the patient's beliefs about the meaning and purpose of life. Any applications of these beliefs related to health and illness would be especially appropriate.

*Reproduced by permission from Marjory Gordon, *Manual of Nursing Diagnosis*, St. Louis, 1982, The C.V. Mosby Company.

A third framework useful for nurses has been suggested by Marilyn Doenges and Mary Moorhouse. It includes thirteen categories. See Supplement 4 for more detailed information.

ACTIVITY/REST
CIRCULATION
EGO INTENSITY
ELIMINATION
FOOD/FLUID
HYGIENE
NEUROSENSORY
PAIN/COMFORT
RESPIRATION
SAFETY
SEXUALITY
SOCIAL INTERACTION
TEACHING/LEARNING

If we had a patient who had difficulty breathing, his assessment findings would be clustered under the Activity-Exercise pattern in Gordon's framework (because his capacity for activity would be impaired) and under Respiration in Doenges' and Moorhouses's framework. Because the human body can exist for only a very short time without oxygen, this problem would have to be dealt with first.

In *Fundamentals of Nursing*, Mary Sundberg suggests that the following order should be used in prioritizing patient problems.

1. Immediately life threatening (airway blockage)
2. Needed for basic life support (fluid intake)
3. Protecting present health status (maintaining joint movement)
4. Promoting progression through a life stage (body image)
5. Promoting health and well-being (change in exercise habits)

Generally, physical needs will receive top priority, but sometimes the patient's psychological state must be dealt with first. The patient must have some input in setting priorities for the whole process to be effective. Nurses may judge one problem the most significant, but the patient may have an entirely different perspective. The nurse may be very concerned with a physical problem such as the patient's circulatory status, but the patient may not be able to cooperate until a problem with family relationships is solved.

OBJECTIVE 6

Distinguish between medical and nursing diagnoses.

Through medical technology, physical exam, and laboratory studies, the physician considers all pathological findings to identify the disease process and give it a name. The medical diagnosis is the name the doctor attaches to the patient's condition after considering all the symptoms. The physician then treats the disease condition with medical measures. Treatment is directed only at the diagnosed condition.

The nurse focuses on the needs of the whole person. All available assessment data, both normal and abnormal, is considered to determine any possible unmet need, dysfunction of a body system, or patient discomfort. The nurse further reviews the data to identify any situational factors that may be causing or contributing to these. A statement that contains both the patient problem and contributing factor is called a nursing diagnosis. This statement identifies a problem that the nurse can treat or prevent through nursing measures.

Since the statement or diagnosis identifies both the problem and cause or contributing factor, the two will be joined by the words "related to." A nursing diagnosis involving pain may be stated "pain related to surgical incision." Pain is the problem, but the reason for the pain is the surgical incision. Perhaps a patient may be experiencing "fear related to lack of information about scheduled diagnostic procedures." Nursing diagnoses can easily handle physical or psychosocial problems.

It is not generally considered the role of the practical nurse to make the nursing diagnosis, but it is important to understand both the medical and nursing diagnoses.

OBJECTIVE 7

Distinguish between correctly and incorrectly stated patient care goals.

Goals, objectives or patient outcomes should be formulated to direct what is done for the patient. All of these terms may be used to describe what we want the patient to accomplish. These may be short-term or long-term. *Short-term goals* should be met within a matter of days, usually during a hospital stay. *Long-term goals* would take weeks or months to be met.

Goals should be measurable, specific and attainable. These are stated using verbs that describe an activity that can be measured.

EXAMPLES: Walks, bathes, dresses, describes, performs, maintains, gains or administers

We make the goal specific by adding conditions such as how much help the patient will have, how far the patient will walk, how much fluid should be consumed, how much weight should be gained and when the goal will be met.

Of course, the goal must be within the capabilities of the patient in order for it to be attainable. The statement "dresses self without assistance at time of discharge" would be a meaningful goal statement. So would "administers own insulin by 10/12."

OBJECTIVE 8

Select true statements about the importance of nursing care plans.

Our way of communicating assessment findings, analysis, and planning is by the use of a nursing care plan. In many health care institutions, practical nurses are not held responsible for initiating nursing care plans, but they contribute to them and use them in providing patient care.

The actual components of the nursing care plan may vary. There may be an area for the assessment data about a specific problem. The nursing diagnosis based on that data might be there. The planned interventions or nursing orders are definitely a part of the care plan. The rationale or reason for those interventions or orders might be included. The goal, objective, or expected outcome is often included. Then there must be a place for evaluation where the nurse can document whether or not the plan was a success.

Many health care institutions have "standardized care plans". If many patients in a particular area have the same medical diagnosis or the same surgical procedure done, they are likely to have the same problems and require the same care. It is then useful to have a printed form available to use for the common aspects of care. These forms will have to be personalized for the individual problems each patient brings with him. For instance, two patients may have a cholecystectomy, or removal of the gall bladder, but one may also be diabetic. His care would be the same as the other in many respects, but he has some special needs because of his diabetes. Two patients may have pneumonia and thus require much of the same care, but one may be 5 years of age and the other 45, requiring differences in their care and their care plans.

Care plans allow all nurses to work for the same common goals, but without duplication of effort in gathering information and planning care. The patient can benefit by improved care. A sample care plan is shown below.

PATIENT CARE PLAN

Length of Stay ________

Unit ________

DRG ________

DATE	PROBLEM	NURSING ACTIONS/DISCHARGE PLANNING	OUTCOME	DATE RESLVD	RN SIGN
	☐ Altered Comfort, ( ) Acute ( ) Chronic	☐ Monitor Vital Signs q ___ hrs. ☐ Check Vital Signs ___ mins. after administering pain medication. ☐ Decrease physical activity during pain intervals. ☐ Check effectiveness of pain relieving agents and document. ☐ Maintain quiet, comfortable environment/avoid stimuli that upsets patient. ☐ ________	☐ Vital Signs do not exceed recommended limits. ☐ Verbal relief of pain and tolerates increased activity. ☐ ________ ☐ ________		
	☐ Breathing pattern, impaired	☐ Restrict po fluid intake. ☐ Assess for presence of cyanosis. ☐ Monitor effects of fluid regulation. ☐ ; crackles, ; ventilation, ; wheezes. ☐ ________	☐ Throughout hospitalization R rate, rhythm depth WNL for pt. ☐ ________ ☐ ________		
	☐ Fluid Volume altered, deficit excess	☐ Daily wt. I&O. ☐ Assess for: ( )BP ( ); or irregular heart rate ( )Peripheral pulse ( )Cool diaphoretic skin ( )Abnormal lytes, BUN ☐ Instruct and enforce fluids and Na restriction. ☐ ________	☐ Patient will be D/C w/adequate cardiac compensation as evidenced by: ( ) Stable VS ( ) ↓ SOB ( ) ↓ Edema ( ) Stable Wt. ☐ ________		
	☐ Bowel Elimination altered, constipation	☐ Identify pt's. normal pattern. ☐ Increase intake of fruits, juices & liquids. ☐ Promote bulk & fiber diet. ☐ ________	☐ Resumes normal elimination pattern _____ days prior to discharge.		

Developed by Pat Lawson, Director of Nurses, Stillwater Medical Center, Stillwater, OK, and used with permission of Stillwater Medical Center.

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OBJECTIVE 9

Label the nursing process steps associated with guidelines for giving self-help instructions to patients.

There is much that a patient and his family needs to know and a nurse skilled in teaching can help them both be well-informed about conditions and skills necessary for care.

The age and abilities of the patient must be taken into account in any instructional situation. Attention span is shorter with children or with older adults. Sight and hearing decrease with age and of course with some other conditions. Older adult learners may need repeated instructions and demonstrations. Abilities in reading and math skills must be taken into account. Just because a patient is an adult, does not mean that she can read.

People learn in different ways. Some prefer to read new information. Some prefer to hear information presented. Some do better with visual clues such as pictures or demonstrations. Some need to handle materials or perform something before maximum learning can take place. The nurse must be aware of all these facets of learning to be an effective teacher.

The steps in patient teaching follow the format of the nursing process.

1. **Assessment**
   - Determine what the patient already knows about the subject.
2. **Analysis**
   - Determine what the patient needs to know.
3. **Planning**
   - Write behavioral objectives for the material to be taught.
   - Gather correct information by checking procedure books, manuals, medication circulars, textbooks, or printed material.

- Verify information with appropriate resource persons(s)

  EXAMPLES: Registered nurse, physician, instructor, dietician, physical therapist, pharmacist, etc.

- Develop the teaching plan.
- Practice the procedure, including methods of instruction.
- Outline the information so that nothing will be left out and list each step of a procedure in sequence.
- Consider the patient and plan the presentation at a level that he can understand.
- Write out questions to ask at certain points to make sure the patient understands.
- Gather all materials ahead of time.
- Select a "teachable" time—when the patient is alert, rested, and no distractions are present or anticipated in the environment.
- Tell the patient ahead of time and make arrangements for family members to be present if this is desirable.
- Collect any visual aids, materials, or supplies that will aid the patient's understanding.
- Practice the actual teaching.
- Assess the patient and the procedure to determine if the information should be presented in short segments rather than all at once.

4. **Implementation**

- Present the information in a step-by-step manner. Use key points and techniques to help the patient remember.
- Stop periodically and ask questions to determine the patient's grasp of the subject. Don't make it sound like a test.

- Summarize what you have taught.

- Provide the patient with written information whenever possible.

  EXAMPLES: Brochures, product inserts, hospital developed materials. Have original material checked by appropriate resource person for accuracy before giving it to patient.

5. **Evaluation**

- Question the patient or have him relate steps of the procedure.

  NOTE: Do this in a non-threatening manner.

- Have all materials accessible.

- Allow the patient to perform procedure.

- Do not allow the patient to perform the procedure incorrectly. Correct the patient when necessary. Be aware of your tone of voice and mannerisms so that the patient does not develop a negative attitude about mistakes.

- If the patient makes a number of mistakes, have him perform the procedure from beginning to end, again. This can be done at another time. Be aware of the patient's mental and physical readiness at all times.

- Provide positive reinforcement ("That's right," "good job") at appropriate points during the procedure and at the end.

- Observe the patient performing the procedure as often as possible to reinforce good habits and correct bad ones that may develop.

OBJECTIVE 10

Select the best word or phrase to complete statements about the nurse's role in admission, discharge, and transfer of patients.

The nurse's actions and attitudes at the time of a patient's admission to a hospital or other health care institution are extremely important. This is the patient's first impression and it needs to be a good one. Patients should be able to feel comfortable with the people and surroundings. They may have a number of concerns and questions such as "What is wrong with me?" "Will I get better?" "Will things done be painful?" "Will I be able to afford the care I need?"

Patients and their families need information at the time of admission. They need to know what is expected of them and what they can expect of the caregivers.

ADMISSION

The admission process is also the beginning of the nursing process. Assessment begins when the nurse first sees the patient. Objective and subjective information is collected during the admission procedure. It is important to remember that patients are also assessing nurses to determine if they are interested in them and their problems and are capable of giving necessary care.

One of the first things patients need to know is who will be caring for them. The admitting nurse needs to introduce himself or herself and tell the patient about the others who will be providing care. It is possible that the patient will even need the doctor's name, if the patient is not acquainted with the physician. The patient's identity should be verified by checking the identification band on the wrist.

Patients need to become acquainted with their individual rooms. One of the first things they need to know is how to get help. This is usually done with a call light, and you will need to explain how the light works. They need to know where the bathroom is, how to control the bed, television, and lights, and how to use the telephone.

Policies such as visiting hours and who may visit should be explained; Any regulations concerning smoking need to be explained.

Family members need to know about public waiting areas, directions to a cafeteria or snack bar, the location of public restrooms, and parking areas.

The patient should be introduced to roommates, if there are any.

The patient's belongings should be stored in the appropriate location. If the nurse is storing the belongings, the patient should be told where things are. Any valuable items such as jewelry, large sums of money, or credit cards should be sent home with family members or locked away in the hospital safe. A detailed inventory should be included if the items are stored at the hospital. Patients should be encouraged not to leave valuable items at the bedside. Many people come and go in a hospital, making it impossible to watch what they are all doing.

If the patient has brought any medications to the hospital, they may be stored with other medications or sent home with family members.

NOTE: Many hospitals do not allow medicines from home to be stored with hospital medications.

Very early in the admission procedure, the nurse should question the patient about any allergies. If the patient relates knowledge of any, the nurse should also find out about the reactions the patient has had to these substances. This information should be related to others in the manner prescribed by the institution. Appropriate departments such as pharmacy or dietary must be notified. A special allergy alert band may be placed on the patient's I.D. band.

It is common to take vital signs on admission, weigh the patient, and collect a urine specimen.

A personal care kit including such items as a bath basin, emesis basin, soap, and soap dish and lotion is provided by most institutions. This should be provided on admission. A hospital gown may be needed.

The nurse should give patients and their families an opportunity to ask questions about any concerns they have. The nurse will help meet the patients' self-esteem needs during admission by calling them by name and by providing privacy for changing into the gown or pajamas.

There may be special admission sheets designed to document all that is done and all information obtained during admission. Documentation of admission should be thorough and in accordance with institutional policy.

On admission to the hospital the patient may have pain or fears. A well-informed, understanding, and efficient nurse can make the procedure easier for the patient. A smooth admission process can also encourage cooperation on the part of patient and family.

TRANSFER

It is sometimes necessary to transfer patients from one room, nursing unit, or health care facility to another. Some guidelines will help reduce stress which could be caused by such a move.

There should be agreement on the part of the two areas as to a convenient time and method of transfer. The receiving area should be made aware of the condition and needs of the patient before the transfer takes place.

All of the patient's belongings should be gathered. This includes such items as clothing that the patient brought into the hospital as well as items charged to the patient in the hospital such as bath basin, bedpan, and dressing materials. All medications should be gathered together. All pieces of the patient's chart and any current worksheets such as an Intake and Output record should go with the patient. A thorough search of the patient's unit should take place before transfer to avoid leaving any items.

The nurse taking the patient to the new area should assist, as far as possible, in introducing the patient to staff members and surroundings. The sending nurse should convey pertinent information to the receiving nurse, including any problems encountered during the transfer and the times of medications and treatments ordered.

In order to provide continuity of care, hospital departments such as dietary, pharmacy, physical therapy, and others providing services to the patient should be notified. The patient's doctor should know that the transfer has taken place if the doctor did not specifically order it. It will prevent many problems and concerns if the patient's family is notified when a transfer has taken place.

The nurse must document all details of the transfer including the patient's condition before, during, and after the transfer. Notation should also be made concerning the disposition of the patient's belongings.

DISCHARGE

Plans for the patient's discharge should be started as soon as the patient is admitted to the hospital. This should include any necessary teaching and arranging for all equipment and care that will be needed after discharge. Of course, the nurse will be involved, but the doctor, social worker, dietician, and family may also be key people in the plans.

Most patients look forward to leaving the hospital. When the day for discharge arrives, their priority activity is leaving, not instruction in diet, learning to change a dressing, or arranging for home health care. Teaching and planning should be started as soon as possible during hospitalization to ensure that learning occurs and plans are made.

On the actual day of discharge, the nurse must be certain that the doctor has written an order for discharge. Usually the patient will also have to make arrangements with the business office before leaving the hospital.

All the patient's belongings should be prepared, including any disposable items that the patient may wish to take home such as bath basins, lotion, water pitchers, etc. Any items stored elsewhere, such as valuables in a safe or medications in a medicine cart, should be retrieved. The patient may need some supplies such as dressing materials. The doctor may write prescriptions to be sent with the patient.

The nurse should review instructions with the patient including activity permitted, medication schedule and possible side effects, diet orders, and when to return to the doctor. It may be helpful to supply the patient with the doctor's office number.

Most hospitals require that the patient be transported by wheelchair to a waiting vehicle. Sufficient help should be available to transport the patient and his belongings. Hospital volunteers may be available to assist.

Documentation at the time of discharge should include the time, method of transport, persons accompanying the patient, destination of the patient, disposition of belongings, notation of instructions given, and assessment of the patient's condition at discharge. There may be special forms to complete. Sometimes patients receive a carbon copy that serves as home-care instructions.

Occasionally patients leave the hospital before the doctor feels they should and without a discharge order. This is called discharge *against medical advice (AMA)*. If the nurse feels that a patient might be planning to leave under such circumstances, the doctor and appropriate nursing supervisors should be notified. The patient may be asked to sign a form relieving the doctor and hospital of responsibility. If the patient is found missing, an appropriate search is made and all necessary people notified. The nurse would document such actions.

OBJECTIVE 11

Match components of the decision-making/problem-solving process to the steps of the nursing process.

Problems are a part of human existence. There are always decisions to be made concerning these problems. The Nursing Process is an attempt to solve problems encountered in nursing practice in an orderly fashion. It is a framework for making nursing decisions. A number of schemes for problem solving or decision making have been developed and they have some similar characteristics.

FIGURE 6

Comparison of Steps in Problem Solving with the Nursing Process

Problem Solving	Nursing Process
Encountering the problem Collecting data	Assessment
Identifying the exact nature of the problem	Analysis
Determining a plan of action	Planning
Carrying out the plan	Implementation
Evaluating the plan in the new situation	Evaluation

Potter, Patricia A., and Perry, Anne G.: *Basic Nursing: Theory and Practice*, ed. 2, St. Louis, 1991, Mosby-Year Book, Inc.

The Problem-Solving Method is the forerunner of the Nursing Process. It can work well in the clinical setting. Both the Problem-Solving Method and the Nursing Process are for problems encountered in everyday life. They provide a realistic pattern for making decisions and evaluating those decisions.

OBJECTIVE 12

Match the steps of the decision-making process with the appropriate behavior for each step.

Making decisions is a part of everyday life. We decide what to wear, whether or not to eat breakfast, what route to drive, whether or not to make a purchase, what to fix to eat, what time to set the alarm. From morning to night, we make decisions; some almost without thinking, so it seems.

In nursing, there are many decisions to be made. We have identified the nursing process as a valuable tool for solving the problem of how to give patients the best possible care. At the same time, there are additional decisions to be made in *applying* the nursing process.

During assessment, we decide how best to obtain the necessary information from the patient and adjust our technique to suit the individual. Analysis involves decisions about what is normal and abnormal. Planning requires decisions about what is best for the patient, taking into account available resources. Intervention demands that we make decisions about the best way to carry out prescribed treatment in the safest, most effective way. Evaluation is a decision about the effectiveness of our efforts.

Three phases of decision making in nursing have been identified. The first is **deliberation**. During deliberation, all the available data must be considered. This is a thorough review of all aspects of the problem. During this process, patterns should emerge and possible alternatives should present themselves.

After deliberation comes **judgment**. Judgment involves examining possible alternatives and the possible effects of each. Each possible alternative is examined in relation to the current situation and the desired outcome.

Choice is the third step of the process. At this point, a decision is made based on the last two steps. If the first two steps were thorough, the decision is more likely to be a good one.

Some decisions both in and out of nursing are made quickly and do not involve serious consequences. Although the entire process is there, it moves so quickly that we hardly notice. Other decisions are so important that they change lives. Deliberation, judgment, and choice take longer and deserve much thought. Consciously practice the steps to improve your decision making.

OBJECTIVE 13

Match options involved in decision making with appropriate risks.

Two nursing educators, Carpenito and Duespohl, have stated that there are seven basic options in making decisions relating to patient care. It is not hard to see that the same options exist in situations outside nursing as well.

The options identified are:

- Do nothing
- Monitor

- Collect more data
- Consult or collaborate
- Delegate
- Refer to another
- Intervene directly

When we make decisions, there is always the risk that we could make the wrong one. Each of the above options could be wrong ones with serious consequences.

- If we make the decision to do nothing in a patient care situation and the patient's condition deteriorates, the patient and his loved ones suffer and we feel guilt.
- If we choose to monitor a situation longer before instituting any decisive action, we may be losing valuable time.
- If we choose to collect more data, we may again lose time.
- If we choose to consult or collaborate, we may not select the right people. We must be sure to choose those who are truly knowledgeable.
- If we delegate, presumably to someone with less knowledge and skills, the task may be done incorrectly.
- If we refer to another, we may face accusations that we are unable or unwilling to handle the situation ourselves.
- If we intervene directly, our actions may be more than necessary or be wrong.

Whenever, we make decisions, we have the risk of being wrong. Sometimes we *will* be wrong, but we cannot let this interfere with our ability to continue making decisions. We must learn from our failures and apply this knowledge the next time.

NANDA

In an effort to make the nursing diagnosis mean more, an organization called the North American Nursing Diagnosis Associations (NANDA) was formed. NANDA publishes an approved list of nursing diagnosis statements. Periodic NANDA conferences update the approved list. At the time of the 1990 conference, about 100 nursing diagnoses have been accepted. Each diagnosis is defined and has a set of symptoms generally present. In this way, nurses are developing their own body of knowledge and their own area of expertise. NANDA has also arranged the diagnoses into groups according to human response patterns. The groups are:

- Exchanging
- Communicating
- Relating
- Valuing
- Choosing
- Moving
- Perceiving
- Knowing
- Feeling

NOTE: Arriving at a nursing diagnosis is not considered to be a function of the practical nurse. However, a general understanding of the process and what the diagnosis means is helpful. The practical nurse will see the nursing diagnosis and will also participate in gathering information used in determining the nursing diagnosis.

WRITING NURSING DIAGNOSES

An approved nursing diagnosis will make up the first part of the nursing diagnosis statement. Further information will help describe the situation for the individual patient involved. The problem is the diagnosis.

EXAMPLE: Fluid volume deficit related to 3 days of vomiting manifested by sunken appearance of eyes, poor skin turgor, decreased urination, increased urine specific gravity, and weight loss.

All of the symptoms were discovered during assessment. They were grouped together to reveal the problem or diagnosis. The diagnostic statement was then made. It is not a medical diagnosis because no disease entity is mentioned. It is a *nursing diagnosis.*

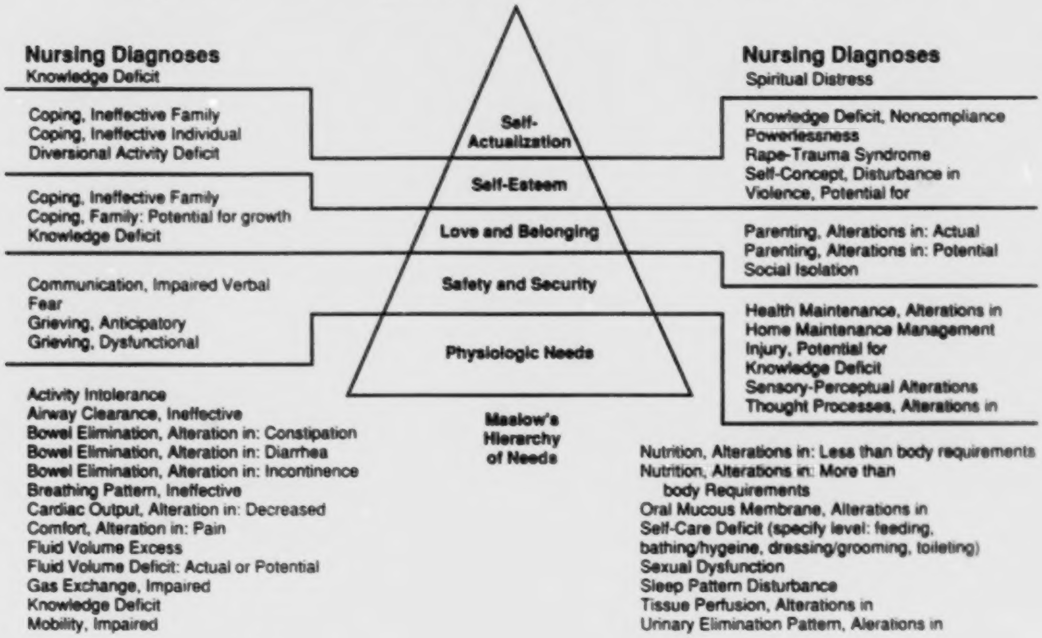
The problems uncovered may be *actual* problems. The patient is currently experiencing difficulty with these. There may also be *potential* problems. In this case, the nurse recognized that problems might develop. A patient could have a potential fluid deficit related to three days of vomiting. In this case, symptoms do not exist, but the nurse realizes they can occur.

There are also *collaborative* problems. These are problems that take medical intervention. The nurse would have to notify the physician of such problems developing to obtain medical orders to resolve them.

NURSING DIAGNOSES USING MASLOW'S HIERARCHY OF NEEDS

A useful model incorporating Maslow's Hierarchy and approved nursing diagnoses has been developed. It is not surprising that many of the diagnoses fall into the physiological needs category.

Categorization of Nursing Diagnoses Using Maslow's Hierarchy of Needs


Nursing Diagnoses
Knowledge Deficit
Coping, Ineffective Family
Coping, Ineffective Individual
Diversional Activity Deficit
Coping, Ineffective Family
Coping, Family: Potential for growth
Knowledge Deficit
Communication, Impaired Verbal
Fear
Grieving, Anticipatory
Grieving, Dysfunctional
Activity Intolerance
Airway Clearance, Ineffective
Bowel Elimination, Alteration in: Constipation
Bowel Elimination, Alteration in: Diarrhea
Bowel Elimination, Alteration in: Incontinence
Breathing Pattern, Ineffective
Cardiac Output, Alteration in: Decreased
Comfort, Alteration in: Pain
Fluid Volume Excess
Fluid Volume Deficit: Actual or Potential
Gas Exchange, Impaired
Knowledge Deficit
Mobility, Impaired
Self-Actualization
Self-Esteem
Love and Belonging
Safety and Security
Physiologic Needs
Maslow's Hierarchy of Needs
Nursing Diagnoses
Spiritual Distress
Knowledge Deficit, Noncompliance
Powerlessness
Rape-Trauma Syndrome
Self-Concept, Disturbance in
Violence, Potential for
Parenting, Alterations in: Actual
Parenting, Alterations in: Potential
Social Isolation
Health Maintenance, Alterations in
Home Maintenance Management
Injury, Potential for
Knowledge Deficit
Sensory-Perceptual Alterations
Thought Processes, Alterations in
Nutrition, Alterations in: Less than body requirements
Nutrition, Alterations in: More than body Requirements
Oral Mucous Membrane, Alterations in
Self-Care Deficit (specify level: feeding, bathing/hygeine, dressing/grooming, toileting)
Sexual Dysfunction
Sleep Pattern Disturbance
Tissue Perfusion, Alterations in
Urinary Elimination Pattern, Alerations in

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NURSING DIAGNOSES ACCORDING TO THE DOENGES-MOORHOUSE MODEL

The following NANDA approved nursing diagnoses are grouped by the categories developed by Doenges and Moorhouse in their book *Nursing Diagnoses with Interventions,** 1991.

Category	Diagnoses
Activity/Rest	Activity Intolerance [specify level] Activity Intolerance, potential Disuse Syndrome, potential for Diversional Activity, deficit Fatigue Sleep Pattern disturbance
Circulation	Cardiac Output, decreased Dysreflexia Tissue Perfusion, altered: (specify) renal, cerebral, cardiopulmonary, gastrointestinal, peripheral

---

*Source: *Nurses's Pocket Guide: Nursing Diagnosis with Interventions* Third Edition, 1991, by Marilyn E. Doenges and Mary Frances Moorhouse. Used with permission of F. A. Davis Publishing Company.

Category	Diagnoses
Ego Integrity	Adjustment, impaired Anxiety [specify level] Body Image disturbance Coping, defensive Coping, individual, ineffective Decisional Conflict (specify) Denial, ineffective Fear Grieving, anticipatory Grieving, dysfunctional Hopelessness Personal Identify disturbance Post-trauma Response Powerlessness Rape-Trauma Syndrome Rape-Trauma Syndrome: compound reaction Rape-Trauma Syndrome: silent reaction Self-esteem, chronic low Self-esteem disturbance Self-esteem, situational low Spiritual Distress (distress of the human spirit)
Elimination	Bowel Incontinence Constipation Constipation, colonic Constipation, perceived Diarrhea Incontinence, functional Incontinence, reflex Incontinence, stress Incontinence, total Incontinence, urge Urinary Elimination, altered patterns Urinary Retention [acute/chronic]

*Continued. Used with permission of F. A. Davis.

Category	Diagnoses
Food/fluid	Breastfeeding, effective Breastfeeding, ineffective Fluid Volume deficit [active loss] Fluid Volume deficit [regulatory failure] Fluid Volume deficit, potential Fluid Volume excess Nutrition, altered, less than body requirements Nutrition, altered, potential for more than body requirements Oral Mucous Membranes, altered Swallowing, impaired
Hygiene	Self-care deficit: feeding, bathing/hygiene, dressing/grooming, toileting
Neurosensory	Sensory-perceptual alterations: (specify) visual, auditory, kinesthetic, gustatory, tactile, olfactory Thought process, altered Unilateral neglect
Pain/Comfort	Pain [acute] Pain, chronic
Respiration	Airway Clearance, ineffective Aspiration, potential for Breathing Pattern, ineffective Gas Exchange, impaired

*Continued. Used with permission of F. A. Davis.

Category	Diagnoses
Safety	Body Temperature, altered, potential Health Maintenance, altered Home Maintenance Management, impaired Hyperthermia Hypothermia Infection, potential for Injury, potential for Physical Mobility, impaired Poisoning, potential for Protection, altered Skin Integrity, impaired Skin Integrity, impaired, potential Suffocation, potential for Thermoregulation, ineffective Tissue Integrity, impaired Trauma, potential for Violence, potential for, directed at self/others
Sexuality [Component of Social Interaction]	Sexual Dysfunction Sexuality Patterns, altered
Social Interaction	Communication, impaired: verbal Family Coping, compromised, Family Coping, disabling Family Coping, potential for growth Family Processes, altered Parental Role Conflict Parenting, altered Parenting, altered, potential Role Performance, altered Social Interaction, impaired Social Isolation

*Continued. Used with permission of F. A. Davis.

Category	Diagnoses
Teaching/Learning	Growth and Development, altered Health Seeking Behaviors (specify) Knowledge Deficit [Learning need] (specify) Noncompliance [Compliance, altered] (specify)

NOTE: Information that appears in brackets has been added by the authors to clarify and enhance the use of nursing diagnoses.

*Continued. Used with permission of F.A. Davis Co.

TYPES OF LEARNING

There are said to be three *domains of learning* or types of learning that take place in humans.

- **Cognitive learning** — Acquiring information

  EXAMPLES: Learning the spelling of a word, practicing multiplication tables, or reciting the steps of a nursing procedure

- **Affective learning** — Involves values and feelings

  EXAMPLES: Our attitudes about people of other races, our beliefs about abortion or our position on corporal punishment in schools

- **Psychomotor learning** — Involves performing a task

  EXAMPLES: A child learning to tie his shoes, a student learning to type or nursing student learning to bathe a patient

All three domains may be involved in patient teaching situations. A newly diagnosed diabetic will use psychomotor learning to acquire the skills for insulin injection. She or he will use cognitive skills to learn the symptoms of hypoglycemia. Her or his attitudes about chronic disease and dependence upon medication may have to be changed and this will involve affective learning.

METHODS TO USE IN PATIENT TEACHING

- Provide reading material.
- Show videotape.
- Play audiotape.
- Use slide/tape presentation.
- Give verbal instructions.
- Ask the patient to repeat instructions.
- Question the patient about important points.
- Demonstrate a procedure.
- Have the patient demonstrate a procedure.
- Provide charts or graphs of important facts.
- Provide pictures of equipment or steps in procedure.
- Write out key points.
- Have the patient write out key points.
- Arrange for attendance at formal group class.
- Arrange for a discussion group of patients with similar needs.
- Arrange for a visit by a former patient who has mastered the same technique.

BRAINSTORMING*

Brainstorming is perhaps the most important single skill in the entire repertory of personal growth activities. The conscientious use of brainstorming and adherence to the rules of brainstorming produce a versatile, creative, mind-expanding way of thinking. The rules should be reviewed often, and it is probably a good idea to discuss the rationale for each with the class.

Rules of Brainstorming

1. Express no negative evaluation of any idea presented.
2. Work for quantity, not quality—the longer the list of ideas, the better.
3. Expand on each other's ideas.
4. Encourage zany, far-out ideas.
5. Record each idea, at least by a key word or phrase.
6. Set a time limit and hold strictly to it.

- **Rationale:** Brainstorming helps to generate a large volume of ideas. It encourages germs of ideas, half-formed ideas; it gives ideas with some merit and some drawbacks a chance to grow and develop, and it turns group problem-solving away from a competitive, one-upping atmosphere towards a truly collaborative venture where the main adversary is the problem to be solved rather than others in the group.

  In a large sense the rules of brainstorming form the structure for the personal growth classroom as a place where all are accepted for what they are, where all may try without fear of failure, where active collaboration is encouraged, and where creativity, individuality, and unorthodoxy are respected.

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*Source: *A Handbook of Personal Growth Activities for Classroom Use*, Education Research Associates, P.O. Box 767, Amherst, MA 01004 by Robert C. and Isabel L. Hawley. Used with permission of the publisher. All rights reserved.

Brainstorming is also an easy and effective method of community building.

1. **Express no negative evaluation:** This rule encourages participants to speak freely without prejudging whether their ideas are good enough to be shared. It says, "All ideas are welcomed here." The aura of acceptance and respect for each individual grows where this rule holds sway as a part of the class routine.

2. **Work for quantity:** This rule helps the idea flow by adding a game-like tension to the activity. Quality is a by-product of quantity. The longer the list, the more likely it is to contain a number of really useful or eventually workable ideas. This rule encourages everyone to try without jeopardy of failure.

3. **Expand on each other's ideas:** This rule tells people that they can help each other. It's important to listen to others because they might spark something in your mind. When one person elaborates on another's idea, he/she is paying a compliment to that person, accepting him/her, appreciating his/her contribution, showing him/her to be a worthy collaborator. This rule can help change the classroom from the scene of a game with winners and losers to a place where all can win.

4. **Encourage zany, far-out ideas:** This rule encourages creativity, individuality, the unusual, and the unexpected. Many zany, far-out ideas have a useful kernel which may not be evident to one proposing the idea but which is picked up later by the group. And, a zany idea may trigger another idea in someone else's mind. Problems are often seen in new ways with this practice.

5. **Record each idea:** This rule takes away the pressure for perfection. Time is seen as a valuable resource to be taken into account in any undertaking. Generally, where a time limit is regularly established and adhered to, personal commitment is high because individuals are relieved of the tension of determining when they worked long enough to satisfy the requirements of the tasks.

Time commitment is an important and often neglected factor in school. The student who has budgeted his/her class-change time carefully to allow himself/herself to go to the bathroom, speak to a friend, or put the finishing touches on an assignment can be rightfully resentful of the teacher who takes two minutes after the bell to finish an important point or to give an assignment. On the other hand, math teachers have reported very good results from asking their students to commit a certain time period to homework (rather than a specific number of problems). Consider the difference in student commitment between asking students to practice their math or English for half-an-hour (just ask they might practice their piano or figure-skating for half-an-hour) and asking them to do 20 problems until they get them all right on the other. Treating students' time as important is another way of showing them that they as individuals are important.

- **Practicing Brainstorming:** Brainstorming is a skill that can be improved through practice. The rules should be reviewed before each brainstorming session and posted on the blackboard or wall. Brainstorming can be done by the entire class or in small groups. Groups of five or six are small enough so that no one need wait to offer his idea, yet large enough so that the variety of ideas is stimulating. When the entire class brainstorms as a group, it may be necessary to have two or three recorders at the blackboards so that they can keep up with the fast-flowing ideas. Brainstorming is no time for raised hands or other such formalities. When small groups brainstorm, it is important to cross-fertilize by having the recorder for each group read the group's list to the entire class, or where time is a problem, groups can pair and read their lists to each other. Another way of sharing groups' lists is to have each person in a group pick the idea he/she likes the most from the group's list, and then have the selected list read to the entire class.

- **Warm-up Brainstorms:** Warm-up brainstorms should be on playful subjects to encourage and show acceptance of zany, far-out ideas. Warm-up brainstorms are designed to free the mind from practical considerations and to encourage flights of fancy. Here are some possible topics for warm-up brainstorms.

    1. You have been stranded on a tropical desert island. Food and water are no problem as the island can provide these in plenty. You have only one artifact of civilization—an empty Coke bottle. Brainstorm uses for the Coke bottle. (Time limit: 5 minutes)

2. Brainstorm ways to improve the common bathtub. (Time limit: 5 minutes)

3. Brainstorm uses for a fire hydrant (junk automobiles, broken baseball bats, tabs from flip-top cans, old wheel covers). (Time limit: 5 minutes)

4. Brainstorm ways to send love to someone far away. (Time limit: 7 minutes)

5. Brainstorm new kitchen appliances. (Time limit: 5 minutes)

6. Brainstorm zany topics for warm-up brainstorms. (Time limit: 5 minutes)

7. Brainstorm a poem on a particular theme that must rhyme and follows the rhythm of a well-known tune (a poem about life in America set to the music of "Davy Crockett"). Let students sing their brainstorm creation when completed.

- **Spectrum Analysis:** For each item on the brainstorm list, *look first* for the good, useful, or workable parts. The idea as a whole may be unworkable, but there may be a useful kernel that can be used to provide a new and creative solution. We are so conditioned to look for the flaws in an idea that the useful part is often overlooked and the wheat is thrown out with the chaff. Following this procedure, the list can be reduced to the three or four most promising items. These few can then be examined in further detail before a final decision is made.

- **Alternative Search:** Brainstorming is a good method for finding alterative solutions for problems.

- **Individual Problems:** An individual can bring a problem for alterative searching to a small group, such as, "How can I keep track of all my assignments?" Several minutes are spent filling in the group on the background of the problem. The group then brainstorms solutions for a specific amount of time (usually no longer than 10 minutes). The individual acts as recorder. The individual can then follow up with a spectrum analysis and a self-contract (see below).

- **Generic Problems:** The class as a whole brainstorms problems that young people their age might have. Then one problem is selected for an alternative search by the whole class, or the class may divide into groups, with each group choosing a problem from the list.

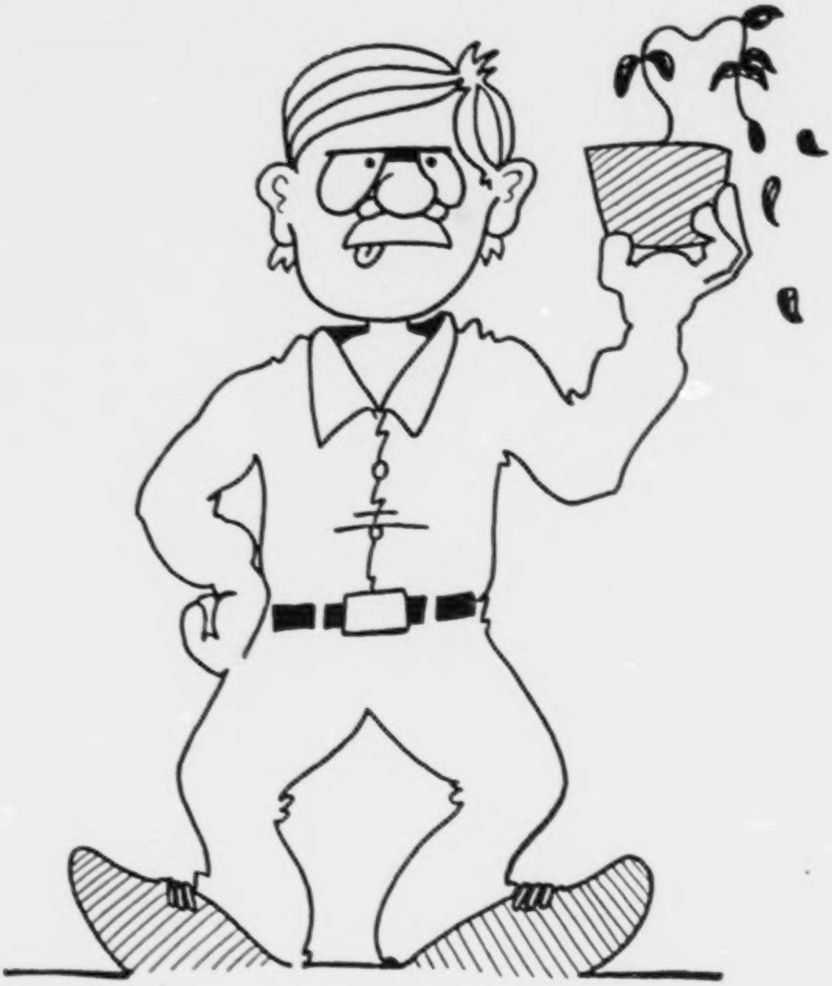
  1. Ways to spend spring vacations.
  2. Ways to make Thanksgiving more meaningful.
  3. Ways to increase your circle of friends.
  4. What to do if your good friend gossips about you.
  5. Ways to save money.

- **Self-Contracting:** Brainstorming is not required for self-contracting, but self-contracting is so often a useful follow-up to an alternative search brainstorm that it is included here.

  Once a person has selected a course of action which may lead towards the solution or reduction of a problem, a contract can be written specifying what must be done, for how long, and what observable indications of success will be used to evaluate it. Since research indicates that about three weeks are necessary for a new pattern of behavior to become fully functional, the final evaluation of the self-contract should come about three weeks after the initiation of the contract.

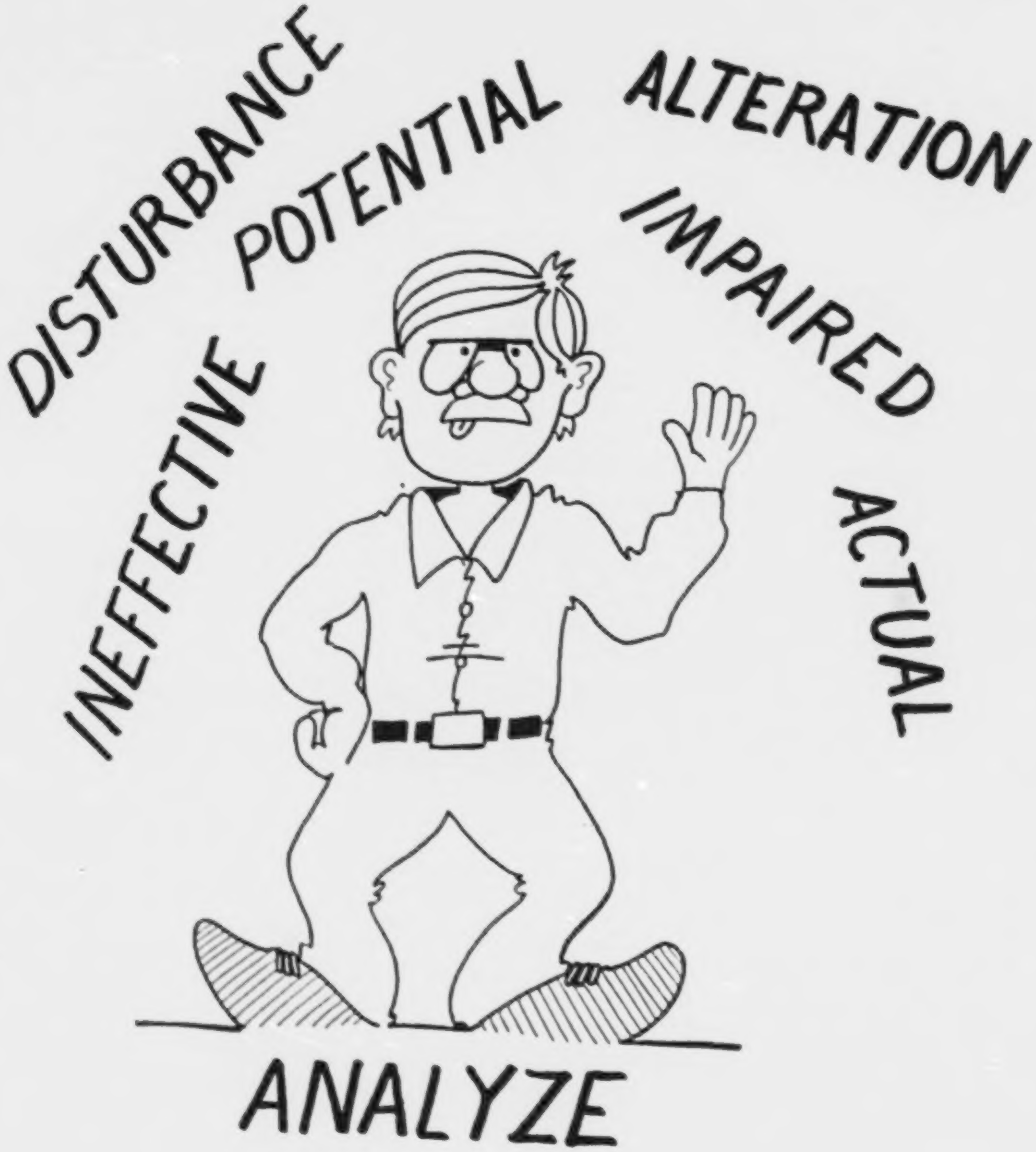
  A self-contract is personal and private. The teacher or other members of the class should never ask to see it. If the student wants to show it to the teacher or others, that is permissible.

- **Brainstorming to Teach Organization:** Brainstorming can be used to show how a subject can be organized in various ways. The class is given a subject and asked to brainstorm subjects that could go under the main heading. Then one of the sub-headings subjects is selected and the class brainstorms sub-headings under that subject. The process can be repeated until the sub-headings (or the students) are exhausted.



ASSESS

Source: Leslie D. Atkinson and Mary Ellen Murray, *Understanding the Nursing Process*, 1980, McGraw-Hill, Inc. Reproduced with permission.


DISTURBANCE
POTENTIAL
ALTERATION
INEFFECTIVE
IMPAIRED
ACTUAL
ANALYZE

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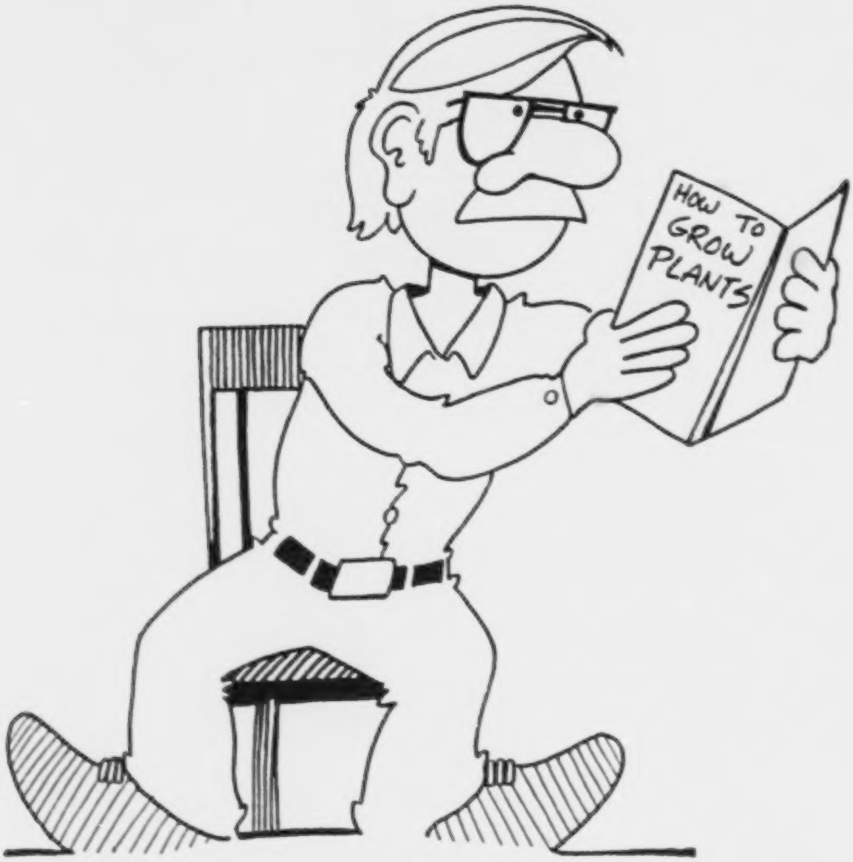

PLAN

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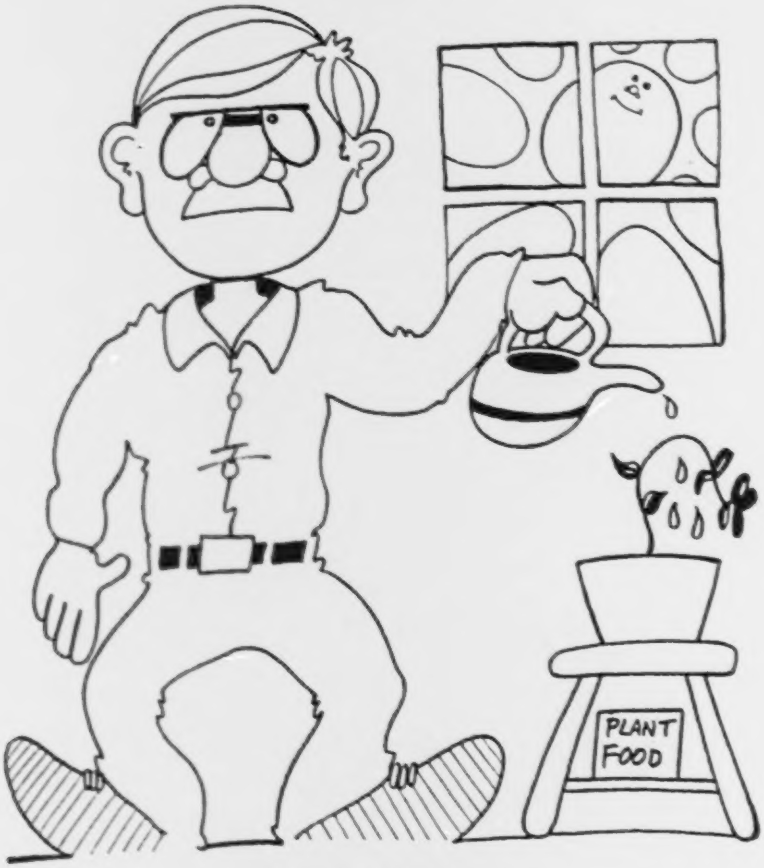

IMPLEMENT

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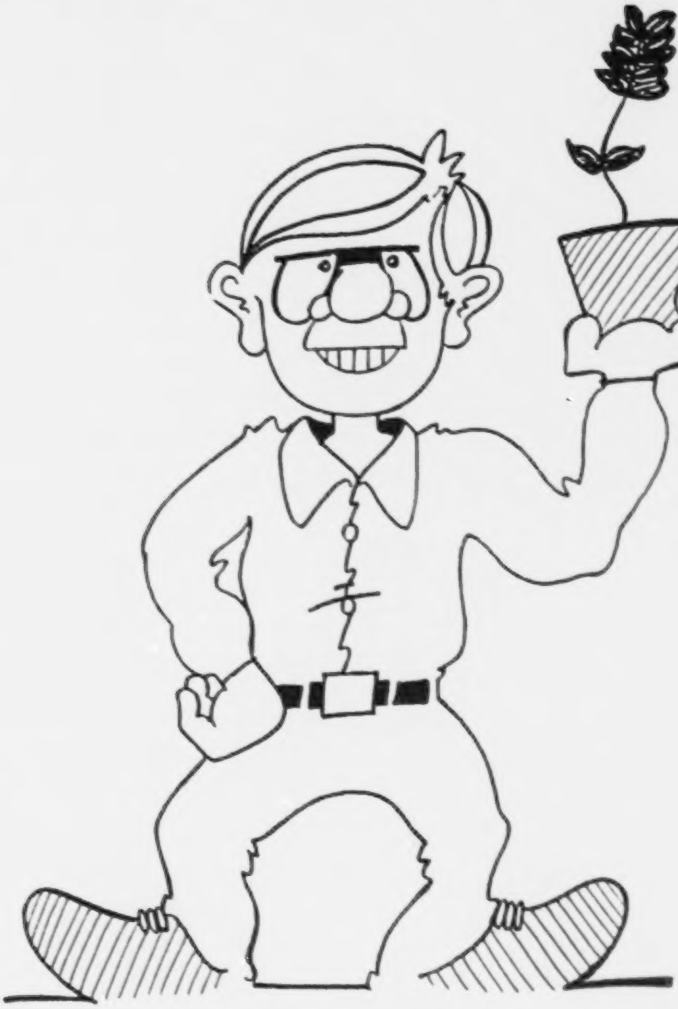

EVALUATE

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Functional Reading Skills
- Use content area vocabulary

NURSING PROCESS CROSSWORD PUZZLE CLUES

ACROSS

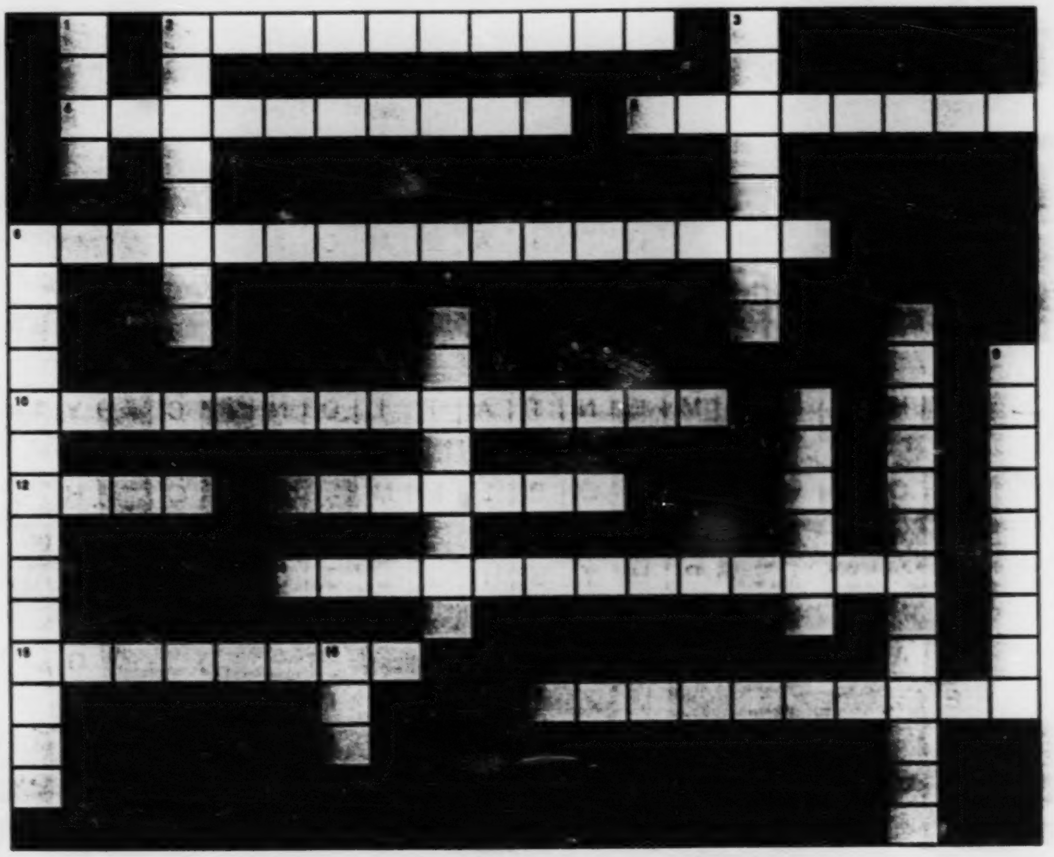
2. Gathering information
4. Judging of an outcome
5. Process of being moved within or between health care institution(s)
6. The naming of a nursing problem that can be resolved by nursing measures
10. Putting a plan into action
12. That which is expected to occur
13. A set of circumstances preventing a need from being met
14. Pertaining to functioning of the body
15. A document developed to guide patient care
17. To arrange in order of importance

DOWN

1. That which is necessary for survival
2. Interpretation of a problem
3. Determining what is to be done
6. A means of determining needed care, delivering that care, and evaluating the effects
7. A body of information collected by interview, physical assessment, and review of diagnostic data
8. Originating in the mind
9. The process of leaving a health care institution
11. In decision making, the step where a course of action is decided upon
16. Leaving a health care institution without the order of a physician

WORD LIST

AMA
ANALYSIS
ASSESSMENT
CAREPLAN
CHOICE
DATABASE
DISCHARGE
EVALUATION
GOAL
IMPLEMENTATION
NEED
NURSINGDIAGNOSIS
NURSINGPROCESS
PHYSIOLOGICAL
PLANNING
PROBLEM
PRIORITIZE
PSYCHOLOGICAL
TRANSFER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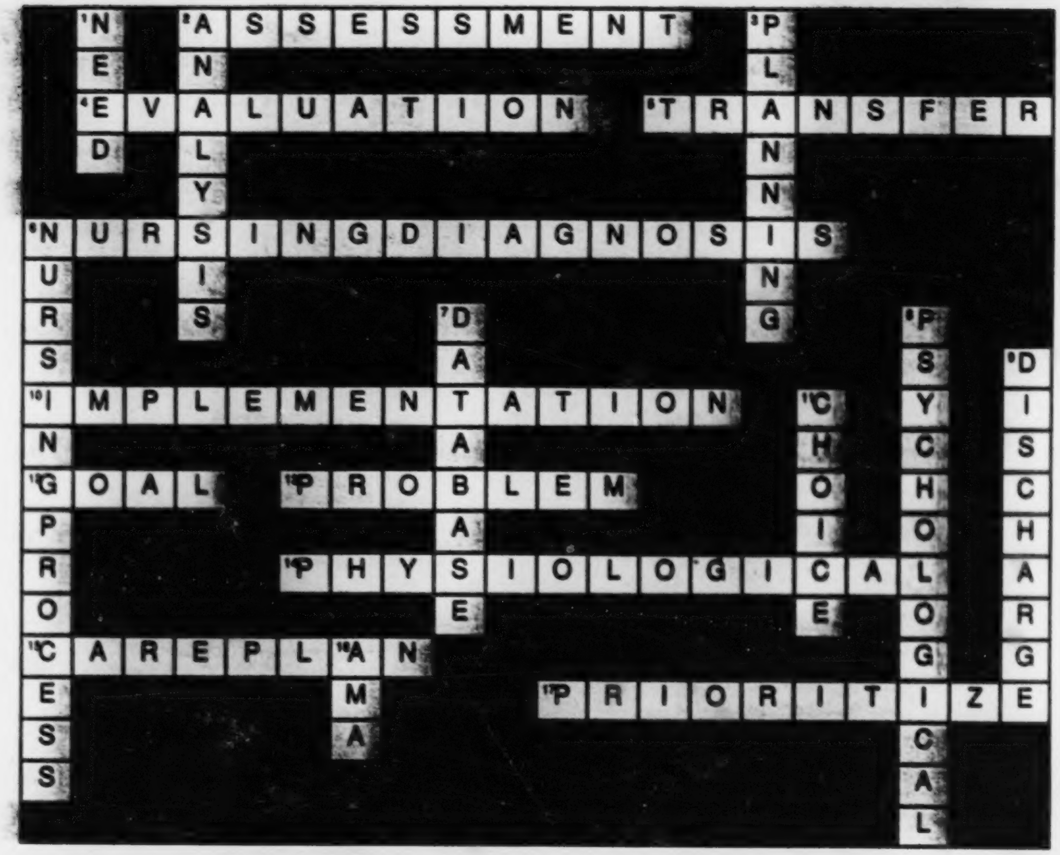
NEED
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CHOICE
GOAL
PROBLEM
PHYSIOLOGICAL
CAREPLAN
AMA
PRIORITIZE

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INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for: READING SKILLS

- Introduce the assignment to the students by discussing why reading skills are important.
- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  — Using content area vocabulary
- If students have difficulty using content area vocabulary, stress the importance of learning medical terminology.

USE STEPS OF THE NURSING PROCESS TO SOLVE A PROBLEM

Cognitive Activities Skills

- Collect/record information
- Apply a problem-solving model
- Analyze/synthesize information

Joe is driving along the highway when suddenly his car begins sputtering and losing speed. As it is about to stop, Joe notices that the gas gauge is on empty. Help Joe solve his problem by using the steps of the nursing process.

ASSESSMENT

(List the available information)

____

____

____

- Draw conclusions

ANALYSIS

(What conclusion can Joe draw?)

____

____

____

- Develop an action plan

PLANNING

(What should Joe plan to do?)

____

____

____

IMPLEMENTATION

(What should Joe do?)

____

____

____

- Evaluate results/ outcomes

EVALUATION

(How would Joe know if his plan worked?)

____

____

____

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 2

Skill development for: CREATIVE THINKING AND PROBLEM-SOLVING

- Introduce the assignment to the students by discussing why problem-solving skills are important.
- Discuss with them the following skills which are relevant to this task:

  CREATIVE THINKING AND PROBLEM-SOLVING SKILLS

  - Collecting/recording information
  - Applying a problem-solving model
  - Drawing conclusions
  - Developing an action plan
  - Evaluating results/outcomes
- If students have difficulty collecting/recording information: ,
  - Instruct them to read carefully to obtain information
  - Stress the importance of accuracy in recording information
- If students have difficulty applying a problem-solving model, examine and discuss the structure of the model.
- If students have difficulty analyzing/synthesizing information:
  - Discuss the fact that analyzing means breaking the information down into all its components for examination.
  - Discuss the fact that synthesizing means to reassemble the information in a way that makes the information clear and useable to the student.

- If students have difficulty drawing conclusions, have them review the information.

- If students have difficulty developing an action plan:

  - Instruct them to identify the issues involved.

  - Discuss the goals of the action plan.

  - Review the information.

- If students have difficulty creating a finished product:

  - Review the analysis and synthesis of information to determine whether the conclusions are correct.

  - Review the action plan to determine whether it will bring the desired results.

  - Discuss the way in which the finished product is organized.

- If students have difficulty evaluating results/outcomes:

  - Discuss the desired results.

  - Discuss the actual results.

  - Compare (How are they alike?) and contrast (How are they different?) the desired results and the actual results.

ACTIVITY SHEET 3

USE THE NURSING PROCESS FOR CARE PLANNING

III

Cognitive Activities Skills

- Collect/record information
- Identify critical elements/issues
- Define a problem
- Apply a problem-solving model
- Analyze/synthesize information
- Identify/evaluate consequences
- Identify/develop alternatives
- Evaluate alternatives
- Select an alternative
- Devise a solution
- Transfer knowledge/training to new situations
- Develop an action plan

APPLY THE NURSING PROCESS

Choose a problem of interest to the group and use the nursing process to solve it. Problems might include finding more study time, fund raising for HOSA, interpersonal relations, etc.

ASSESSMENT

How would you determine that a problem existed? What might an on-looker, observer, or a participant feel? What are the "symptoms?"

ANALYSIS

Group the observations together to look for patterns. Make a statement of the problem. If possible, put it in the terminology of a nursing diagnosis.

PLANNING

1. Look at the problem or "diagnosis" in terms of Maslow's Hierarchy. What need or needs are not being met? If there are several needs, prioritize them.

2. Write an objective to guide in solving the problem.

3. Write "nursing orders" or steps in solving the problem.

INTERVENTION

What should happen here?

EVALUATION

How will evaluation take place?

USE THE NURSING PROCESS FOR CARE PLANNING

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 3

Skill development for: CREATIVE THINKING AND PROBLEM-SOLVING

- Introduce the assignment to the students by discussing why creative thinking and problem-solving skills are important.
- Discuss with them the following skills which are relevant to this task:

  CREATIVE THINKING AND PROBLEM-SOLVING SKILLS

  - Collecting/recording information
  - Identifying critical elements/issues
  - Defining a problem
  - Applying a problem-solving model
  - Analyzing, synthesizing information
  - Identifying/evaluating consequences
  - Identifying/developing alternatives
  - Evaluating alternatives
  - Selecting an alternative
  - Devising a solution
  - Transferring knowledge/training to new situations
  - Developing an action plan

- If students have difficulty identifying critical elements/issues, review the information noting the key words and issues.

- If students have difficulty defining a problem:
  - Have them discuss what needs are not being met.
  - Examine and discuss the critical issues.
- If students have difficulty identifying/evaluating consequences:
  - Discuss the effects of the problem.
  - Discuss the causes of the problem.
- If students have difficulty identifying/developing alternatives:
  - Have them discuss ways to remove the causes of the problem.
  - Have them discuss ways to change the effects of the problem.
- If students have difficulty evaluating alternatives:
  - Have them list the strong and weak points of each alternative.
  - Have them review the critical elements and issues.
- If students have difficulty selecting an alternative:
  - Instruct them to review the alternative evaluations to determine which alternative to select.
  - Remind them that if none of the alternatives is suitable, they will need to gather more information and/or develop more alternatives.
- If students have difficulty devising a solution:
  - Discuss ways to implement the selected alternative.
  - Have them organize all the pertinent information.

- If students have difficulty transferring knowledge/training to new situations:
  - Review the pertinent training. Compare the new situation to the training situation.
  - Examine ways in which training can be used in the new situation.
- For additional suggestions on teaching basic skills, refer to Instructional Supplement for Activity Sheet 2.

ACTIVITY SHEET 4

USE THE NURSING PROCESS FOR CARE PLANNING

III

Cognitive Activities Skills
- Identify critical elements/issues

IDENTIFY NEEDS

Decide which of Maslow's needs are best described in the following examples. Place the letter of the need indicated next to the number.

a. Physiological
b. Safety and security
c. Love and belonging
d. Self-esteem
e. Self-actualization

______1. Mrs. Smith, an 85-year-old nursing-home resident, complains that her son has not visited in two weeks.

______2. Mr. Arnold is having an asthmatic attack and complains of difficulty in breathing.

______3. Jimmy, a three-year-old, is afraid of the dark.

______4. Mr. North, a construction worker, has been injured on the job and now has casts on both arms, making it difficult to feed himself.

______5. Kelly, a two-year-old, tries to climb over the side of her crib.

______6. Ms. Thompson is having diagnostic tests for severe headaches and complains constantly of the headaches.

______7. Ms. Willis has been admitted to the hospital after vomiting for two days at home.

______8. Todd, a college student, recuperating from surgery, works on his humanities class assignments.

______9. Ms. Kennedy, a nursing-home resident, knits a great deal.

_____10. Scott, a four-year-old, thinks his family no longer loves him since his new sister has arrived.

_____11. Ms. Carpenter worries about her appearance after her mastectomy.

_____12. Mr. Redding is reluctant to apply for food stamps to supplement his income.

_____13. Janie has a fever of 102° F.

_____14. Sterile technique is used to change Mr. Webb's dressing.

_____15. Ms. Lake asks many questions about her scheduled surgery.

USE THE NURSING PROCESS FOR CARE PLANNING

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 4

Skill development for: CREATIVE THINKING AND PROBLEM-SOLVING

- Introduce the assignment to the students by discussing why creative thinking and problem-solving skills are important.
- Discuss with them the following skills which are relevant to this task:

  CREATIVE THINKING AND PROBLEM-SOLVING SKILLS

  - Identifying critical elements/issues
- For additional suggestions on teaching basic Skills, refer to Instructional Supplement for Activity Sheet 3.

ACTIVITY SHEET 5 — USE THE NURSING PROCESS FOR CARE PLANNING III

Cognitive Activities Skills
- Identify critical elements/issues

DISTINGUISH BETWEEN MEDICAL AND NURSING DIAGNOSES

Write an "M" in the blank before medical diagnoses and an "N" in the blank before nursing diagnoses.

______1. Infection following abdominal surgery

______2. Impaired swallowing related to sore throat

______3. Impaired skin integrity related to immobility

______4. Paralysis secondary to motor vehicle accident

______5. Constipation related to low fluid and fiber intake

______6. Pneumonia following long-term immobility

______7. Fear related to scheduled surgical procedure

______8. Asthmatic episode caused by weather change

______9. Breast cancer with metastasis to lymph nodes

_____10. Noncompliance to drug therapy related to fear of side effects

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 5

Refer to Instructional Supplement for Activity Sheet 4.

ACTIVITY SHEET 6

USE THE NURSING PROCESS FOR CARE PLANNING

III

Language Skills
- State ideas clearly

Cognitive Activities Skills
- Identify critical elements/issues

RECOGNIZE PATIENT GOALS

Determine whether the following patient goals (outcomes, objectives) are stated correctly by writing an "X" in the appropriate column.

Part 1

	Correct	Incorrect	
1.			Help patient dress self by discharge
2.			Demonstrate correct insulin injection
3.			Drink 2000 cc of fluid daily
4.			Learn side effects of Lanoxin by next office visit
5.			Perform complete active range of motion exercises for left shoulder three times a day
6.			Be willing to assume more responsibility for personal care in one week
7.			Change wound dressing using sterile technique by time of discharge
8.			Teach patient symptoms of wound infection by time of discharge
9.			Eat more fiber daily
10.			Exhibit 10 pounds of weight loss in five months

Part 2

Write appropriate statements for the following situations.

You are the nurse caring for Ms. Stevens after a total hip replacement. She is learning to walk with a walker. She needs to walk the length of the hallway before discharge. Write a goal statement for this task.

Mr. Barrow has been placed on a new medication to control his blood pressure. He needs to know something about the possible side effects. Write a goal statement to communicate this.

USE THE NURSING PROCESS FOR CARE PLANNING

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 6

Skill development for: WRITING
CREATIVE THINKING AND PROBLEM-SOLVING

- Introduce the assignment to the students by discussing why writing and creative thinking and problem-solving skills are important.
- Discuss with them the following skills which are relevant to this task:

WRITING

— State ideas clearly

CREATIVE THINKING AND PROBLEM-SOLVING SKILLS

— Identifying critical elements/issues

- If students have difficulty stating ideas clearly:
  - — Suggest they have their thoughts organized before they begin writing.
  - — Review the information noting the key words and ideas. Discuss the importance of stating the ideas clearly. Instruct them to use simple concise words.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 3.

USE THE NURSING PROCESS FOR CARE PLANNING

ACTIVITY SHEET 1

Provided

ACTIVITY SHEET 2

Variable - Acceptable to instructor

ACTIVITY SHEET 3

Variable - Acceptable to instructor

ACTIVITY SHEET 4

1. c
2. a
3. b
4. a
5. b
6. a
7. a
8. e
9. e
10. c
11. d
12. d
13. a
14. b
15. b

ACTIVITY SHEET 5

1. M
2. N
3. N
4. M
5. N
6. M
7. N
8. M
9. M
10. N

ACTIVITY SHEET 6

Part 1

1. Incorrect
2. Correct
3. Correct
4. Incorrect
5. Correct
6. Incorrect
7. Correct
8. Incorrect
9. Correct
10. Correct

Part 2

Walk length of hallway using walker by discharge.

List side effects of medication.

ASSIGNMENT SHEET 1

USE THE NURSING PROCESS FOR CARE PLANNING

NAME ________________________________ SCORE ________

OBJECTIVE 14 **Evaluate specific nursing actions in terms of the nursing process.**

INTRODUCTION Nursing actions fall within one of the steps of the nursing process. Thinking of various nursing actions in terms of the five steps of the nursing process may help bring it into perspective.

DIRECTIONS In this assignment sheet, determine which step of the nursing process is represented by each of the following nursing actions.

a. Assessment
b. Analysis
c. Planning
d. Implementation
e. Evaluation

Functional Reading Skills
- Use content area vocabulary

Cognitive Activities Skills
- Identify critical elements/issues

______1. Turns the patient every two hours

______2. Interviews the patient on admission

______3. Checks with the patient 30 minutes after pain medication has been given to determine how comfortable the patient is

______4. Checks admission vital signs of patient

______5. Adds a note concerning oral hygiene to the care plan

______6. Assists the patient to a chair

______7. Teaches the patient to administer insulin

______8. Inspects the skin after wet packs have been removed

______9. Compares normal values with the patient's lab work

_____10. States that the patient should drink 800 cc of fluid each shift

a. Assessment
b. Analysis
c. Planning
d. Implementation
e. Evaluation

_____11. Decides that the patient's need for rest is greater than his need for information concerning surgery scheduled for the following day

_____12. Weighs the patient each morning before breakfast

_____13. Listens to the breath sounds of a patient

_____14. Watches the patient change his own dressing after instruction

_____15. Reviews assessment data to identify patient problems

USE THE NURSING PROCESS FOR CARE PLANNING

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

Skill development for: READING
CREATIVE THINKING AND PROBLEM-SOLVING

- Introduce the assignment to the students by discussing why reading and creative thinking and problem-solving skills are important.
- Discuss with them the following skills which are relevant to this task:

  READING

  — Use content area vocabulary

  CREATIVE THINKING AND PROBLEM-SOLVING SKILLS

  — Identifying critical elements/issues
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheets 1 and 3.

ASSIGNMENT SHEET 2

USE THE NURSING PROCESS FOR CARE PLANNING

NAME ______________________ SCORE ________

OBJECTIVE 15

Organize a teaching plan.

INTRODUCTION

Teaching is an important nursing intervention. It is an intervention that takes planning to be successful.

DIRECTIONS

Mr. Thomas will be going home from the hospital in a few days, but he will have to change a dressing on his leg each day using sterile technique. Nancy Ford, a student practical nurse, is assisting in the teaching process. Arrange in the correct sequence, the steps she uses in providing instruction according to the steps of the nursing process.

Part 1

Write the sequenced numbers in the blanks.

In teaching Mr. Thomas, Nancy:

______1. Demonstrates the procedure

______2. Practices what she plans to teach

______3. Writes the statement, "Mr. Thomas will change his dressing using sterile technique by the time of discharge."

______4. Talks to the doctor about the type of materials needed for the dressing change

______5. Praises successful behaviors as Mr. Thomas attempts the dressing change

______6. Chooses a time for the presentation

______7. Asks questions to check understanding during the demonstration

______8. Watches Mr. Thomas perform the procedure

______9. Has instructor look over prepared guidelines on sterile technique

Cognitive Activities Skills
- Identify critical elements/issues
- Apply a problem-solving model

_____10. Gathers supplies

_____11. Asks Mr. Thomas if he has ever used sterile technique

_____12. Considers Mr. Thomas's ability to grasp information

_____13. Talks to Mr. Thomas's wife about attending the teaching session

_____14. Provides Mr. Thomas with the guidelines for sterile technique

_____15. Writes an outline of the teaching session

_____16. Immediately corrects any wrong actions as Mr. Thomas demonstrates the procedure.

_____17. Writes out a list of guidelines in using sterile technique after consulting a textbook

_____18. Has Mr. Thomas talk through the procedure before attempting it

Part 2

Write the number of the steps in the correct order under the appropriate stage of the nursing process.

Assessment

____

____

Analysis

____

____

Planning

____

____

Implementation

____

____

Evaluation

____

____

USE THE NURSING PROCESS FOR CARE PLANNING

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 2

Skill development for: CREATIVE THINKING AND PROBLEM-SOLVING

- Introduce the assignment to the students by discussing why creative thinking and problem-solving skills are important.
- Discuss with them the following skills which are relevant to this task:

  CREATIVE THINKING AND PROBLEM-SOLVING SKILLS

  - Identifying critical elements/issues
  - Applying a problem-solving model
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheets 2 and 3.

ASSIGNMENT SHEET 3

USE THE NURSING PROCESS FOR CARE PLANNING

III

NAME ______________________________ SCORE ________

OBJECTIVE 16 **Use a hospital admission form to begin the admission process.**

INTRODUCTION

Health care facilities have some sort of admission form which will be used to gather necessary data during the admission process. In most hospitals, a registered nurse is responsible for complete much of the form. Practical nurses frequently initiate the process and have much to do with insuring the comfort and safety of patients. The practical nurse may also provide for safety of the patient's belongings.

DIRECTIONS

Use the following form to begin the admission process for this patient. Complete the portion which a practical nurse would complete. Review the rest of the admission form to become familiar with the type of information that nurses are concerned with as they begin to care for a patient.

SCENARIO

Mr. Sam Evans is being admitted to the hospital at 1:30 p.m. of the current date for treatment of pneumonia. He is a 62-year-old man who arrives on the nursing unit by wheelchair accompanied by his wife, Nora. He has been ill at home for several days and his doctor has now decided to admit him to the hospital. His home phone number is listed as 287-4142 on the admission sheet.
He is fully dressed upon arrival, wearing blue slacks and a blue striped knit shirt, black socks, black shoes, and undershorts. He places all of these items in the locker pointed out to him by the nurse.

The nurse also helps him unpack the suitcase he has brought along. He has three pairs of pajamas, one robe, and a pair of slippers. He has brought along some toilet articles.

In his pocket he has a wallet containing about $40 in cash and several credit cards. The nurse suggests that his wife take the wallet home. Mr. Evans agrees, but chooses to keep $2.00 in change to buy newspapers. He also chooses to wear his wedding band which he states is gold. He wears glasses and tells the nurse that he has an upper partial plate. The nurse supplies him with a denture cup for storage when needed.

Reading Comprehension Skills
- Gain factual information

Functional Reading Skills
- Interpret forms and records
- Use content area vocabulary
- Interpret abbreviations/ acronyms

Functional Writing Skills
- Complete forms and records

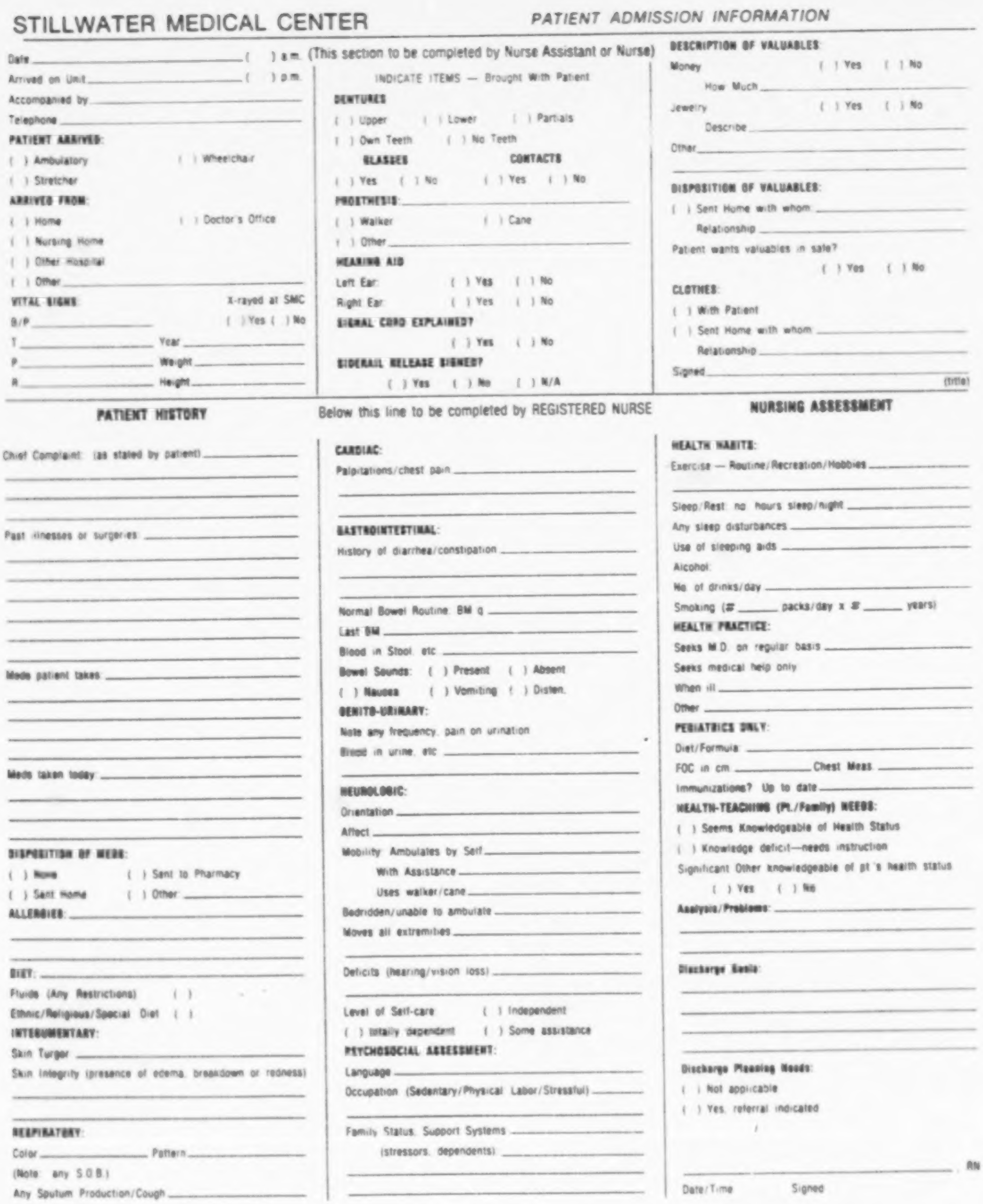
Life Science Skills
- Investigate health issues (medical)

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes

The nurse finds that his temperature is 100.6, his pulse is 72, and his respirations are 18. His blood pressure is 144/86. He is 5'9" tall and weighs 170 pounds. The nurse also learns that he has previously had X-rays completed at the hospital, the last one, a year ago.

The nurse shows him how to operate the call light and explains that his telephone number is 734-8 + the room number, which is 221. The nurse explains to Mrs. Evans where she may park and also describes the locations of the hospital snack bar. Finally, the nurse explains the advisability of keeping the siderails on the bed in place. Mr. Evans agrees to keep them up.

NOTE: This facility requires siderails to be in place or a release signed for patients over 65 years of age.



STILLWATER MEDICAL CENTER *PATIENT ADMISSION INFORMATION*

(This section to be completed by Nurse Assistant or Nurse)

Date ____ ( ) a.m.
Arrived on Unit ____ ( ) p.m.
Accompanied by ____
Telephone ____

PATIENT ARRIVED:
( ) Ambulatory ( ) Wheelchair
( ) Stretcher

ARRIVED FROM:
( ) Home ( ) Doctor's Office
( ) Nursing Home
( ) Other Hospital
( ) Other ____

VITAL SIGNS: X-rayed at SMC
B/P ____ ( ) Yes ( ) No
T ____ Year ____
P ____ Weight ____
R ____ Height ____

INDICATE ITEMS — Brought With Patient

DENTURES
( ) Upper ( ) Lower ( ) Partials
( ) Own Teeth ( ) No Teeth

GLASSES **CONTACTS**
( ) Yes ( ) No ( ) Yes ( ) No

PROSTHESIS: ____
( ) Walker ( ) Cane
( ) Other ____

HEARING AID
Left Ear: ( ) Yes ( ) No
Right Ear: ( ) Yes ( ) No

SIGNAL CORD EXPLAINED?
( ) Yes ( ) No

SIDERAIL RELEASE SIGNED?
( ) Yes ( ) No ( ) N/A

DESCRIPTION OF VALUABLES:
Money ( ) Yes ( ) No
How Much ____
Jewelry ( ) Yes ( ) No
Describe ____
Other ____

DISPOSITION OF VALUABLES:
( ) Sent Home with whom ____
Relationship ____
Patient wants valuables in safe?
( ) Yes ( ) No

CLOTHES:
( ) With Patient
( ) Sent Home with whom ____
Relationship ____
Signed ____ (title)

Below this line to be completed by REGISTERED NURSE

PATIENT HISTORY

Chief Complaint: (as stated by patient) ____
Past illnesses or surgeries: ____
Meds patient takes: ____
Meds taken today: ____

DISPOSITION OF MEDS:
( ) None ( ) Sent to Pharmacy
( ) Sent Home ( ) Other: ____

ALLERGIES: ____

DIET: ____
Fluids (Any Restrictions) ( )
Ethnic/Religious/Special Diet ( )

INTEGUMENTARY:
Skin Turgor ____
Skin Integrity (presence of edema, breakdown or redness) ____

RESPIRATORY:
Color ____ Pattern ____
(Note: any S.O.B.)
Any Sputum Production/Cough ____

CARDIAC:
Palpitations/chest pain ____

GASTROINTESTINAL:
History of diarrhea/constipation ____
Normal Bowel Routine: BM q ____
Last BM ____
Blood in Stool, etc ____
Bowel Sounds: ( ) Present ( ) Absent
( ) Nausea ( ) Vomiting ( ) Disten.

GENITO-URINARY:
Note any frequency, pain on urination
Blood in urine, etc ____

NEUROLOGIC:
Orientation ____
Affect ____
Mobility: Ambulates by Self ____
With Assistance ____
Uses walker/cane ____
Bedridden/unable to ambulate ____
Moves all extremities ____
Deficits (hearing/vision loss) ____
Level of Self-care ( ) Independent
( ) totally dependent ( ) Some assistance

PSYCHOSOCIAL ASSESSMENT:
Language ____
Occupation (Sedentary/Physical Labor/Stressful) ____
Family Status, Support Systems ____
(stressors, dependents) ____

NURSING ASSESSMENT

HEALTH HABITS:
Exercise — Routine/Recreation/Hobbies ____
Sleep/Rest: no. hours sleep/night ____
Any sleep disturbances ____
Use of sleeping aids ____
Alcohol:
No. of drinks/day ____
Smoking (# ____ packs/day x # ____ years)

HEALTH PRACTICE:
Seeks M.D. on regular basis ____
Seeks medical help only
When ill ____
Other ____

PEDIATRICS ONLY:
Diet/Formula: ____
FOC in cm ____ Chest Meas. ____
Immunizations? Up to date ____

HEALTH-TEACHING (Pt./Family) NEEDS:
( ) Seems Knowledgeable of Health Status
( ) Knowledge deficit—needs instruction
Significant Other knowledgeable of pt.'s health status
( ) Yes ( ) No

Analysis/Problems: ____

Discharge Goals: ____

Discharge Planning Needs:
( ) Not applicable
( ) Yes, referral indicated

____ ____ , RN
Date/Time Signed

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USE THE NURSING PROCESS FOR CARE PLANNING

**INSTRUCTIONAL
SUPPLEMENT
FOR
ASSIGNMENT
SHEET 3**

Skill development for: READING
WRITING
SCIENCE
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, science, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

READING

— Gaining factual information

— Interpreting forms and records

— Using content area vocabulary

— Interpreting abbreviations/acronyms

WRITING

— Completing forms and records

SCIENCE

— Investigating health issues

EMPLOYABILITY

— Mastering a specific job task/procedure

— Practicing good work habits/attitudes

- If students have difficulty gaining factual information, remind them to read carefully, noting key words and ideas.

- If students have difficulty interpreting forms and records, examine the structure of the form being used.

- If students have difficulty using abbreviations/acronyms, stress the importance of learning medical terminology.

- If students have difficulty completing forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of accuracy in recording data.
- If students have difficulty investigating health issues, have them review the health information in an admission form and discuss the ways in which the information is important.
- If students have difficulty mastering a specific job task/procedure:
  - Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.
  - Suggest they study each component of the procedure to determine which area is causing difficulty.
  - Review the entire procedure.
  - Team them with proficient students or professionals to practice the procedure.
- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.
  - Make sure the student knows what is expected of him or her.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

ASSIGNMENT SHEET 4

USE THE NURSING PROCESS FOR CARE PLANNING

III

NAME ______________________________ SCORE ________

OBJECTIVE 17

Inventory and store patient's possessions.

INTRODUCTION

Keeping the patient's belongings safe is a nursing responsibility. First the nurse must know what belongings the patient brought. Most health care facilities have a form to inventory personal possessions that will be used during transfer and at the time of discharge. An accurate inventory is essential in case questions are raised about what the patient had on admission.

Each item should be described. The nurse should not draw conclusions about the composition or value of items, but only describe what is seen. For instance, a ring might be described as yellow metal with a clear stone. A watch might be described as having a silver-colored expansion band.

Whenever possible, items which might be lost or are valuable should be sent home with family members. If that is not possible, they should be placed in the facility's safe. It should be clearly indicated on the inventory that items are being sent home or stored elsewhere.

DIRECTIONS

Use the following form to inventory the belongings of Mr. Evans, whose admission form you began in Assignment Sheet 3.

Reading Comprehension Skills
- Gain Factual information

Language Skills
- State ideas clearly

Functional Writing Skills
- Complete forms and records

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Practice good work habits/attitudes

VALUABLES INVENTORY

PATIENT'S NAME ____

DATE __________ TIME __________ SITE OF INVENTORY __________

ITEMS INVENTORIED

CLOTHING ____

____

JEWELRY ____

____

DENTURES ____

GLASSES/CONTACT LENSES ______________________________

HEARING AID ______________________________________

PROSTHESIS _______________________________________

MONEY ____

OTHER ITEMS ______________________________________

____

COMMENTS ____

____

SIGNATURE OF RESPONSIBLE RECEIVING PARTY ________________

INVENTORIED BY ________________

WITNESS ____

USE THE NURSING PROCESS FOR CARE PLANNING

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 4

Skill development for: READING
WRITING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

  READING

  — Gaining factual information

  WRITING

  — Stating ideas clearly

  — Completing forms and records

  EMPLOYABILITY

  — Mastering specific job task/procedure

  — Practicing good work habits/attitudes

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 6 and Assignment Sheet 3.

ASSIGNMENT SHEET 5

USE THE NURSING PROCESS FOR CARE PLANNING

III

NAME ______________________________ SCORE ________

OBJECTIVE 18 **Apply the brainstorming process.**

INTRODUCTION

Brainstorming is a technique that allows a group to generate a great many ideas in a short time. There are many times in nursing where looking for solutions in a group will be a beneficial activity. More people will create more ideas. Practice the brainstorming process and use it whenever possible to generate a number of possible solutions to problems at hand.

DIRECTIONS

Read Supplement 6 before starting this assignment. Use a blank sheet of paper to record ideas generated.

1. Determine the group size.

   NOTE: Groups of 5-6 may encourage greater participation.

2. State the problem to be brainstormed.
3. Select a recorder for each group to quickly write down all ideas offered in brief form.
4. Set a time limit.
5. Encourage *quantity* of ideas, not quality.
6. Encourage wild ideas.
7. Allow no negative comments about any ideas presented.
8. Encourage expansion on one another's ideas. Build on any idea presented.
9. Stop promptly when time is up.
10. If the whole group was divided, each small group should report their ideas to the whole group.

Oral Presentation Skills
- Make informative presentations

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Work effectively in a group
- Communicate with co-workers

General Relating Rules
- Participate in group activities
- Interact with co-workers

Cognitive Activities Skills
- Collect/record information
- Apply intuitive thinking techniques (brainstorming)
- Evaluate alternatives
- Devise a solution

11. After the brainstorming, ideas can be evaluated, joined together, or discarded to come up with possible solutions.

    NOTE: For practice, brainstorm fun topics such as uses for a pencil, unmatched socks, empty cereal boxes; ways to improve a bathtub, a tricycle; the perfect date; new inventions. Then move on to more practical subjects such as ways to raise money for HOSA, how to find more study time, low-cost vacations. Apply it to nursing by brainstorming desirable qualities in a nurse, ways to communicate caring to a patient, possible nursing diagnoses in a specific situation.

USE THE NURSING PROCESS FOR CARE PLANNING

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 5

Skill development for: ORAL COMMUNICATION
INTERPERSONAL OR RELATING
CREATIVE THINKING AND PROBLEM-SOLVING

- Introduce the assignment to the students by discussing why oral communication, interpersonal or relating, and creative thinking and problem-solving skills are important.
- Discuss with them the following skills which are relevant to this task:

  ORAL COMMUNICATION

  — Making informative presentations

  — Applying active listening skills

  — Working effectively in a group

  — Communicating with co-workers

  INTERPERSONAL OR RELATING

  — Participating in group activities

  — Interacting with co-workers

  CREATIVE THINKING AND PROBLEM-SOLVING

  — Collecting/recording information

  — Applying creative/intuitive thinking process (brainstorming)

  — Evaluating alternatives

  — Devising a solution

- If students have difficulty making an information presentation, remind them to organize their thoughts before they begin speaking.

- If students have difficulty making an informative presentation, instruct them to write the main ideas and refer to them as needed.
- If students have difficulty applying active listening skills:
  - Suggest that they be ready to listen before beginning the communication.
  - Stress the importance of focusing on the speaker.
  - Remind them that maintaining eye contact enhances listening ability.
- If students have difficulty working or participating effectively in a group:
  - Stress the importance of taking a part in the discussion and stating ideas.
  - Remind them to listen respectfully to the ideas and opinions of others.
  - Stress the importance of having a positive attitude.
  - Ask them to work constructively to set and achieve the goals of the group.
- If students have difficulty communicating on interacting with co-workers, review listening skills, questioning techniques, giving/following oral directions, and non-verbal communication skills.
- If students have difficulty applying creative/intuitive thinking techniques (brainstorming):
  - Review the guidelines for brainstorming.
  - Discuss the fact that brainstorming is a technique that becomes easy with practice.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheets 2 and 3.

ASSIGNMENT ANSWERS

USE THE NURSING PROCESS FOR CARE PLANNING

III

ASSIGNMENT SHEET 1

1. d
2. a
3. e
4. a
5. c
6. d
7. d
8. e
9. b
10. c
11. c
12. d
13. a
14. e
15. b

ASSIGNMENT SHEET 2

Part 1

1. 12
2. 8
3. 3
4. 2
5. 17
6. 9
7. 13
8. 15
9. 5
10. 7
11. 1
12. 11
13. 10
14. 14
15. 6
16. 16
17. 4
18. 18

Part 2

Assessment 11
Analysis 4
Planning 3, 17, 9, 15, 10, 2, 6, 13, 12
Intervention 1, 7, 14
Evaluation 8, 16, 5, 18

ASSIGNMENT
SHEET 3

STILLWATER MEDICAL CENTER

PATIENT ADMISSION INFORMATION

Date current ☐ a.m.
Arrived on Unit 130 ☒ p.m.
Accompanied by wife
Telephone 555-1234

PATIENT ARRIVED:
☐ Ambulatory ☒ Wheelchair
☐ Stretcher

ARRIVED FROM:
☒ Home ☐ Doctor's Office
☐ Nursing Home
☐ Other Hospital
☐ Other

VITAL SIGNS:
X-rayed at SMC ☒ Yes ☐ No
B/P 144/86
T 100.6 Year previous year
P 72 Weight 5'9"
R 18 Height 170

(This section to be completed by Nurse Assistant or Nurse)

INDICATE ITEMS — Brought With Patient

DENTURES
☒ Upper ☐ Lower ☒ Partials
☐ Own Teeth ☐ No Teeth

GLASSES
☒ Yes ☐ No

CONTACTS
☐ Yes ☒ No

PROSTHESIS: N/A
☐ Walker ☐ Cane
☐ Other

HEARING AID
Left Ear ☐ Yes ☒ No
Right Ear ☐ Yes ☒ No

SIGNAL CORD EXPLAINED?
☒ Yes ☐ No

SIDERAIL RELEASE SIGNED?
☐ Yes ☐ No ☒ N/A

DESCRIPTION OF VALUABLES:
Money ☒ Yes ☐ No
How Much $2.00
Jewelry ☒ Yes ☐ No
Describe yellow metal ring
Other N/A

DISPOSITION OF VALUABLES:
☒ Sent Home with whom Nora Evans
Relationship wife
Patient wants valuables in safe?
☐ Yes ☐ No

CLOTHES:
☒ With Patient
☐ Sent Home with whom
Relationship
Signed Student's Signature (title)

Below this line to be completed by REGISTERED NURSE

PATIENT HISTORY

Chief Complaint: (as stated by patient)
Past illnesses or surgeries
Meds patient takes
Meds taken today

DISPOSITION OF MEDS:
☐ None ☐ Sent to Pharmacy
☐ Sent Home ☐ Other

ALLERGIES:

DIET:
Fluids (Any Restrictions) ☐
Ethnic/Religious/Special Diet ☐

INTEGUMENTARY:
Skin Turgor
Skin Integrity (presence of edema, breakdown or redness)

RESPIRATORY:
Color Pattern
(Note any S.O.B.)
Any Sputum Production/Cough

CARDIAC:
Palpitations/chest pain

GASTROINTESTINAL:
History of diarrhea/constipation
Normal Bowel Routine: BM q
Last BM
Blood in Stool, etc
Bowel Sounds ☐ Present ☐ Absent
☐ Nausea ☐ Vomiting ☐ Disten

GENITO-URINARY:
Note any frequency, pain on urination
Blood in urine, etc

NEUROLOGIC:
Orientation
Affect
Mobility: Ambulates by Self
With Assistance
Uses walker/cane
Bedridden/unable to ambulate
Moves all extremities
Deficits (hearing/vision loss)
Level of Self-care ☐ Independent
☐ totally dependent ☐ Some assistance

PSYCHOSOCIAL ASSESSMENT:
Language
Occupation (Sedentary/Physical Labor/Stressful)
Family Status, Support Systems
(stressors, dependents)

NURSING ASSESSMENT

HEALTH HABITS:
Exercise — Routine/Recreation/Hobbies
Sleep/Rest: no. hours sleep/night
Any sleep disturbances
Use of sleeping aids
Alcohol:
No. of drinks/day
Smoking (# ____ packs/day x # ____ years)

HEALTH PRACTICE:
Seeks M.D. on regular basis
Seeks medical help only
When ill
Other

PEDIATRICS ONLY:
Diet/Formula
FOC in cm ____ Chest Meas
Immunizations? Up to date

HEALTH-TEACHING (Pt./Family) NEEDS:
☐ Seems Knowledgeable of Health Status
☐ Knowledge deficit—needs instruction
Significant Other knowledgeable of pt.'s health status
☐ Yes ☐ No

Analysis/Problems:

Discharge Goals:

Discharge Planning Needs:
☐ Not applicable
☐ Yes, referral indicated

____ , RN
Date/Time Signed

BEST COPY AVAILABLE

ASSIGNMENT SHEET 4

VALUABLES INVENTORY

PATIENT'S NAME Sam Evans

DATE Current TIME 1^{30}/pm SITE OF INVENTORY Patient's room

ITEMS INVENTORIED

CLOTHING Blue slacks, Blue striped shirt, Black socks, Black shoes, undershorts, 3 pair pajamas, 1 robe, slippers

JEWELRY yellow metal ring

DENTURES upper partial plate

[✓ GLASSES]/CONTACT LENSES 1 pair

HEARING AID none

PROTHESIS none

MONEY $2.00

OTHER ITEMS none

COMMENTS Patient's wife taking wallet with cash and credit cards

SIGNATURE OF RESPONSIBLE RECEIVING PARTY wife's signature

INVENTORIED BY student's signature

WITNESS

ASSIGNMENT SHEET 5

Check that the student followed the rules of brainstorming. Evaluate the amount of participation, given the overall group activity. Evaluate the group decision based on appropriateness, clarity of expression, thoroughness of thought, and creativity.

WRITTEN TEST

USE THE NURSING PROCESS FOR CARE PLANNING III

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with the nursing process to their correct definitions. Write the correct letter in the blank.

Part 1

Match the following terms concerned with the Nursing Process.

______1. The name of a nursing problem that can be resolved by nursing measures

______2. Putting a plan into action

______3. Interpretation of a problem

______4. Gathering information

______5. A set of circumstances preventing a need from being met

______6. Judging of an outcome

______7. That which is necessary for survival

______8. Determining what is to be done

a. Analysis

b. Assessment

c. Data base

d. Evaluation

e. Intervention

f. Medical diagnosis

g. Need

h. Nursing diagnosis

i. Planning

j. Problem

Part 2

______1. Generation of ideas by a group working together

______2. That which is expected to occur

______3. Gathering information by talking with someone

______4. Statements to direct nursing care

______5. Relative importance

______6. A document developed to guide patient care

______7. Arrangement of health problems by human functions

______8. Functions normally carried out by an individual

______9. Information obtained by observations of an examiner

______10. A means of determining needed care, delivering that care and evaluating the effects

a. Activities of daily living

b. Brainstorm

c. Care plan

d. Diagnosis

e. Functional health patterns

f. Interview

g. Nursing orders

h. Nursing process

i. Objective

j. Objective data

k. Priority

l. Subjective data

Part 3

______1. Attaining one's full potential

______2. Information obtained by listening to an account of the patient's experience

______3. Originating in the mind

______4. A model developed to describe human needs

______5. Regard for one's self

______6. That which is expected to occur

______7. The process of entering a health care institution

______8. Leaving a health care institution without the order of a physician

a. Admission
b. Against Medical Advice
c. Functional health patterns
d. Maslow's Hierarchy of Needs
e. Objective
f. Physiological
g. Psychological
h. Self-actualization
i. Self-esteem
j. Subjective data

Part 4

______1. In decision making, the act of weighing alternatives against desired outcomes

______2. A body of information collected by interview, physical assessment, and review of diagnostic data upon admission to a health care institution

______3. In decision making, the act of gathering data about a decision to be made

______4. The name of a problem as determined by a physician

______5. That which is expected to occur

______6. Recording information

______7. Naming a problem

______8. In decision making the step where a course of action is decided upon

a. Goal

b. Choice

c. Data base

d. Deliberation

e. Diagnosis

f. Documentation

g. Judgement

h. Medical diagnosis

i. Priority

j. Problem

Part 5

______1. Pertaining to functioning of the body

______2. To arrange in order of importance

______3. Information about past and present health problems and activities of daily living gathered by patient interview

______4. That which is expected to occur after a considerable period of time

______5. Putting a plan into action

______6. Process of being moved within or between health care institution(s)

______7. That which is expected to occur in a short period of time

a. Expected outcome

b. Implementation

c. Long-term goal

d. Nursing history

e. Objective

f. Physiological

g. Prioritize

h. Short-term goal

i. Transfer

OBJECTIVE 2

List the steps of the nursing process.

____

____

____

____

____

OBJECTIVE 3

Select the correct word or phrase to complete statements about the nursing process. Write the correct letters in the blanks.

______1. Which order correctly describes the steps of the nursing process?

a. Planning, Evaluation, Analysis, Intervention, Assessment
b. Assessment, Analysis, Planning, Implementation, Evaluation
c. Physiological, safety and security, love and belonging, self-esteem, self-actualization
d. Love and belonging, safety and security, self-actualization, physiological, self-esteem

______2. Which action would *not* belong with the others in one of the steps of the nursing process?

a. Deciding which problem to deal with first
b. Applying lotion to the patient's skin
c. Teaching the patient how to administer insulin
d. Assisting the patient out of bed

______3. Which group of terms describes the parts of a data base?

a. Functional health patterns, Maslow's hierarchy and activities of daily living
b. Analysis, Intervention and Evaluation
c. Interview, Physical assessment and Diagnostic data
d. Past history, family history and history of present illness

______4. In talking with a newly admitted patient, the nurse learns that he lives alone, eats three meals a day, smokes one pack of cigarettes a day and plays tennis weekly for recreation. All of this information would be described as ___.

a. Activities of daily living
b. Chief complaint
c. History of present illness
d. Past history

______5. Examining information in the data base and grouping similar findings together is called

a. Prioritizing
b. Assessment
c. Evaluation
d. Analysis

______6. The statement "Turn every 2 hours" would be a

a. Nursing order
b. Nursing diagnosis
c. Goal
d. Care plan

______7. Comparing the patient's pulse with the normal range is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Implementation
e. Planning

______8. Checking to see if swelling is decreased after having an arm elevated on a pillow is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Implementation
e. Planning

______9. Feeding a patient is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Implementation
e. Planning

_____10. Checking skin color is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Implementation
e. Planning

_____11. Which action would **NOT** belong with the others in one of the steps of the nursing process?

a. Noting lip color
b. Taking the patient's temperature
c. Adjusting the care plan
d. Taking the patient's history

_____12. In talking with a newly admitted patient, the nurse learns that she had an appendectomy six years ago and has had frequent bladder infections since she had her last baby. She has three children, ages 22, 29, and 32. Her husband is deceased. All of this information would be described as ___.

a. Activities of daily living
b. Chief complaint
c. History of present illness
d. Past history

_____13. Taking vital signs and teaching a patient how to clean an incision is part of ___.

a. Intervention
b. Assessment
c. Evaluation
d. Analysis

_____14. The statement "Encourage coughing and deep breathing" would be a ___.

a. Nursing order
b. Nursing diagnosis
c. Goal
d. Care plan

_____15. Assisting the patient to a wheelchair is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Intervention
e. Planning

_____16. Writing the statement "Provide oral hygiene each shift" is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Intervention
e. Planning

_____17. Interviewing the patient on admission is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Intervention
e. Planning

_____18. Watching the patient change her own ostomy bag is part of ___.

a. Analysis
b. Assessment
c. Evaluation
d. Intervention
e. Planning

OBJECTIVE 4

List the five levels of needs in Maslow's model, from lowest or most immediate to highest.

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________

OBJECTIVE 5

Prioritize patient problems using Maslow's hierarchy and other categories of human functions. Indicate the problem in each pair which would need to be solved first. Write the correct letter in the blank.

Part 1

_______1. a. Hunger
b. Lack of visitors

_______2. a. Boredom
b. Shortness of breath

_______3. a. Elevated temperature
b. Anxiety about appearance

_______4. a. Unsteady gait
b. Lack of information about diagnostic procedure

_______5. a. Fluid loss after vomiting
b. Anxiety about possibie job loss

_______6. a. Nausea
b. Lack of privacy

_______7. a. Lack of information about condition
b. Inability to breathe

_______8. a. Severely abnormal laboratory test results
b. Feelings of helplessness

_______9. a. Worry about missing work
b. Inadequate fluid intake

______10. a. Difficulty in getting along with roommate
b. Pain

Part 2

Choose the BEST answer to the following items on prioritizing needs by categories. Write the correct letter in the blank.

______1. The nurse finds that an 80-year-old patient who lives alone weighs 95 pounds. Her breakfast consists of toast and coffee; she eats a few crackers during the day and in the evening she usually has canned soup. Her dentures fit poorly, causing pain when chewing. Arthritis makes it difficult for her to get around and prepare food. Some of her lab work indicates anemia and altered levels of electrolytes. The nurse could determine that the most prominent problem was in the health pattern of ___.

a. Elimination
b. Sleep-rest
c. Nutritional-metabolic
d. Role-relationship

______2. A deaf patient's deficit would likely be most prominent in the pattern known as ___.

a. Activity-exercise
b. Cognitive-perceptual
c. Health-perception/Health management
d. Coping-stress-tolerance pattern

______3. In dealing with the family of a patient who was approaching death, the nurse would probably first be concerned with the pattern ___.

a. Value-belief
b. Role-relationship
c. Sleep-rest
d. Self-perception/self concept

______4. In prioritizing care for a patient with a number of problems, it is important for the nurse to ___.

a. Check a textbook to see which is most important
b. Tell the patient which is most important
c. Ask the doctor which is most important
d. Ask the patient which is most important

OBJECTIVE 6

Distinguish between medical and nursing diagnoses. Write an "M" in the blank before each medical diagnosis and an "N" in the blank before each nursing diagnosis.

______1. Pain related to spinal tap

______2. Anxiety related to unknown outcome of surgery

______3. Wound infection secondary to second degree burns

______4. Gastroenteritis with dehydration

______5. Activity intolerance related to chronic obstructive pulmonary disease

______6. Influenza with high fever and sore throat.

______7. Sleep pattern disturbance related to lack of exercise

______8. Chronic pain related to knee injury

______9. Chronic obstructive pulmonary disease complicated by pneumonia

OBJECTIVE 7

Distinguish between correctly and incorrectly stated patient care goals. Write a "C" before each correctly stated response and an "I" before each incorrectly stated response.

______1. Perform self care

______2. Show improved nutritional status

______3. Experience less weakness as evidenced by walking the length of the hall without assistance

______4. Assist the patient with range of motion exercises

______5. Exhibit reduced pain by requesting pain medication only one time in eight hours

______6. List side effects of medication at time of discharge

______7. Know how to change dressing after demonstration

______8. Transfer from bed to wheelchair without assistance within one week

______9. Provide high calorie snacks for patient

OBJECTIVE 8

Select true statements about the importance of nursing care plans. Write an "X" in the blank before each true statement.

______1. Care plans are developed by the patient's physician.

______2. The care plan will be exactly the same for two patients having the same surgical procedure.

______3. Using the care plan can help all nurses give coordinated care.

______4. Each nursing shift develop a care plan.

______5. Nursing orders are always a part of a care plan.

______6. Standardized care plans are of no value.

OBJECTIVE 9

Label the nursing process steps associated with guidelines for giving self-help instructions to patients. Write the correct step of the nursing process illustrated in the blank. Write "1" for Assessment, "2" for Analysis, "3" for Planning, "4" for Implementation, and "5" for Evaluation.

______1. Provided the patient with written information about the subject.

______2. Observe the patient performing the procedure.

______3. Select a teachable time.

______4. Discuss what the patient already knows about the subject.

______5. Do not allow the patient to perform the procedure incorrectly.

______6. Practice the procedure.

______7. Make arrangements for family members to be present for teaching.

______8. Determine what the patient needs to know

______9. Provide positive reinforcement

______10. Write behavioral objectives for material to be taught

OBJECTIVE 10

Select the best word or phrase to complete statements about the nurse's role in admission, discharge, and transfer of patients. Write the letter of the correct answer in the blank.

______1. When a patient is going home, the nurse should make sure that instructions have been given concerning ___.

a. Diet
b. Medications
c. Activity
d. All of the above

______2. People involved in discharge planning would include ___.

a. All nurses who care for the patient
b. The patient and social worker
c. The patient's physician
d. All of the above

______3. Discharge planning should begin ___.

a. On the day of discharge
b. When the patient asks questions about discharge
c. After the patient has been hospitalized at least five days
d. On the day of admission

______4. Admission procedures are *most* important because ___.

a. A urine specimen is collected, adding to diagnostic data
b. Hospitals offer a safe environment
c. The nursing process is initiated
d. The patient's identification bracelet is applied

______5. The nurse admitting a patient who has a watch, rings and a considerable sum of cash would be INCORRECT in ___.

- a. Making an accurate inventory of the items
- b. Advising the patient to store the items in the bedside table
- c. Advising the family to take the items home
- d. Locking the items in the hospital safe

______6. As a nurse prepares a patient to leave the hospital, it is *not* necessary to have ___.

- a. Approval by the business office
- b. A doctor's order
- c. Home care instructions
- d. Family permission

______7. The action of a nurse transferring a patient that would NOT be beneficial would be to ___.

- a. Keep the medications for use by another patient
- b. Give a verbal report to the receiving nurse
- c. Notify the patient's family of the transfer
- d. Document the transfer in the patient's chart

______8. The nursing process begins when the nurse ___.

- a. Takes the patient history
- b. First sees the patient
- c. Takes the urine specimen
- d. Places the ID bracelet on the patient

______9. If a patient checks out AMA, the nurse ___.

- a. Is held responsible
- b. Must document all actions regarding the missing or discharged patient
- c. Must dispose of his or her belongings
- d. Has probably offended the patient

_____10. During the admission process, it is the nurse's responsibility to ___.

a. Administer medications the patient has brought into the hospital
b. Isolate the patient
c. Decide what procedures will be performed
d. Show the patient how to use the call light

_____11. The BEST time to teach a patient how to manage a new diet would be ___.

a. The day of discharge
b. Two days before discharge
c. As soon as possible during hospitalization
d. As soon as the patient has sufficiently recovered from surgery

_____12. When the patient is transferred, ___.

a. New personal care utensils are provided
b. The social worker orders the transfer
c. The receiving area should be made aware of the patient's condition and needs upon receipt of the patient
d. The nurse should make notes about the friendliness of the receiving nurses

OBJECTIVE 11

Match components of the decision-making/problem-solving process to the steps of the nursing process. Write the correct letter in the blank. Letters may be used more than once.

______1. Determining a plan of action

______2. Identifying the exact nature of the problem

______3. Encountering the problem

______4. Evaluating the plan in the new situation

______5. Collecting data

______6. Carrying out the plan

a. Assessment

b. Analysis

c. Planning

d. Implementation

e. Evaluation

OBJECTIVE 12

Match the steps of the decision-making process with the appropriate behavior for each step. Write the correct letter in the blank. Some answers may be used more than once.

______1. Patterns emerge

______2. Thorough review of all aspects of the problem

______3. Examining the possible alternatives in relation to the desired outcome

______4. Making the decision

______5. Examining the possible alternatives and the effects of each

______6. All available data is considered

a. Choice

b. Deliberation

c. Judgment

OBJECTIVE 13

Match options involved in decision making with appropriate risks. Write the correct letter in the blank. Some items have more than one correct answer.

______1. You may face accusations that you are unable or unwilling to handle the situation yourself.

______2. The patient and his loved ones suffer and you feel guilt.

______3. Your actions may be more than necessary or be wrong.

______4. You may choose people who are not truly knowledgeable.

______5. The task may be done incorrectly.

______6. You may lose valuable time.

a. Collect more data

b. Consult or collaborate

c. Delegate

d. Do nothing

e. Intervene directly

f. Monitor

g. Refer to another

NOTICE The following assignment sheets are not part of the Written Test. If these activities have not been completed, check with your instructor.

OBJECTIVE 14 **Evaluate specific nursing actions in terms of the nursing process.** SCORE ______

OBJECTIVE 15 **Organize a teaching plan.** SCORE ______

OBJECTIVE 16 **Use a hospital admission form to begin the admission process.** SCORE ______

OBJECTIVE 17 **Inventory and store patient's possessions.** SCORE ______

OBJECTIVE 18 **Apply the brainstorming process.** SCORE ______

WRITTEN TEST ANSWERS

USE THE NURSING PROCESS FOR CARE PLANNING

III

OBJECTIVE 1

Part 1

1. h
2. e
3. a
4. b
5. j
6. d
7. g
8. i

Part 2

1. b
2. i
3. f
4. g
5. k
6. c
7. e
8. a
9. j
10. h

Part 3

1. h
2. j
3. g
4. d
5. i
6. e
7. a
8. b

Part 4

1. g
2. c
3. d
4. h
5. a
6. f
7. e
8. b

Part 5

1. f
2. g
3. d
4. c
5. b
6. i
7. h

OBJECTIVE 2

1. Assessment
2. Analysis
3. Planning
4. Implementation
5. Evaluation

OBJECTIVE 3

1. b.
2. a
3. c
4. a
5. d
6. a
7. a
8. c
9. d
10. b
11. c
12. d
13. a
14. a
15. d
16. e
17. b
18. c

OBJECTIVE 4

1. Physiological
2. Safety and security
3. Love and belonging
4. Self-esteem
5. Self-actualization

OBJECTIVE 5

Part 1

1. a
2. b
3. a
4. a
5. a
6. a
7. b
8. a
9. b
10. b

Part 2

1. c
2. b
3. a
4. d

OBJECTIVE 6

1. N
2. N
3. M
4. M
5. N
6. M
7. N
8. N
9. M

OBJECTIVE 7

1. I
2. I
3. C
4. I
5. C
6. C
7. I
8. C
9. I

OBJECTIVE 8

3, 5

OBJECTIVE 9

1. 4 Implementation
2. 5 Evaluation
3. 3 Planning
4. 1 Assessment
5. 5 Evaluation
6. 3 Planning
7. 3 Planning
8. 2 Analysis
9. 5 Evaluation
10. 3 Planning

OBJECTIVE 10

1. d
2. d
3. d
4. c
5. b
6. d
7. a
8. b
9. b
10. d
11. c
12. c

OBJECTIVE 11

1. c
2. b
3. a
4. e
5. a
6. d

OBJECTIVE 12

1. b
2. b
3. c
4. a
5. c
6. b

OBJECTIVE 13

1. g
2. d
3. e
4. b
5. c
6. a, f

OBJECTIVES 14-18

Refer to answers to Assignment Sheets 1-5.

OBJECTIVE SHEET

USE INFECTION CONTROL TECHNIQUES

IV

INTRODUCTION

Microorganisms are all around us. In fact, they are on us and in us. Under most conditions, they do not cause us any problems. However, when our natural body defenses are compromised, the microorganisms can cause serious problems. For the weak or sick individual, the problems can be immense.

Nurses must recognize the body's protective mechanisms and maintain these defenses for themselves and their patients. Understanding the "chain of infection" will help the nurse break the chain and prevent infection. When infection is present, nurses must take steps to protect themselves and their patients.

All of this is involved in infection control. It is an important part of safety for the nurse and the patient. Adequate infection control techniques can save time, pain, and money. It is a critical subject for every health care professional.

UNIT OBJECTIVE

After completing this unit the student should be able to apply knowledge of growth needs of pathogens, natural body defenses and the chain of infection to prevent infection from occurring or existing infection from spreading. The student will demonstrate this knowledge by completing an assignment sheet, job sheets and the written test with a minimum of 85 percent accuracy.

PREREQUISITES

Before studying this unit, the student should have successfully completed Unit 1 "Microbiology and Bacteriology" in *Body Structure and Function*.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with infection control practices to the correct definitions.
2. Select the word or phrase that completes statements about microorganism growth.
3. Select the word or phrase that completes statements about natural body defenses and their maintenance.
4. Select factors that may alter natural body defenses.
5. Explain the links in the chain of infection.

6. Select the word or phrase that completes statements about the mechanism and purposes of the inflammatory response.

7. Select the word or phrase that completes statements about nosocomial infections.

8. Distinguish between medical and surgical asepsis.

9. Select appropriate personal hygiene measures for the nurse to ensure medical asepsis.

10. Select appropriate personal hygiene measures for the patient to ensure medical asepsis.

11. Select the word or phrase that completes statements about measures to maintain concurrent disinfection.

12. Select the word or phrase that completes statements about barrier techniques used for infection control.

13. Match isolation categories with methods of transmission, examples of diseases and protective measures.

14. Select from a list nursing responsibilities to meet the emotional needs of the isolated patient.

15. Develop a teaching plan for the isolated patient. (Assignment Sheet 1)

16. Demonstrate the ability to:

    a. Perform effective handwashing. (Job Sheet 1)

    b. Perform concurrent cleaning of the patient's room. (Job Sheet 2)

    c. Use the correct technique to don and remove isolation gear. (Job Sheet 3)

    d. Use the correct technique to enter isolation room, double-bag contaminated items, and leave room. (Job Sheet 4)

USE INFECTION CONTROL TECHNIQUES

PREPARATION

- Review the unit and plan presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- Invite a guest speaker to discuss infection control techniques.

  NOTE: Please provide the guest speaker with the specific topic relevant to the unit of instruction ahead of time. You may want to provide the Objective Sheet, Information Sheet, Job Sheets, or any other material you wish the speaker to address. Confirm the scheduled appearance 2-3 days prior to the presentation.
- Obtain models and large pictures of infection control techniques.
- Make a poster of infection control techniques.
- Make a bulletin board showing modes of transmission.
- Devise games and/or crossword puzzles to reinforce terms.
- Make transparencies
- **HOSA** Integration
  - Assist students to conduct a chapter service project on infection control.

- — Develop objectives for service project and identify a theme.

- — Create a poster according to Extemporaneous Health Display rules-display in highly visible areas.

- — Use guidelines for Handwashing from Nursing Assistant competitive event.

- — Plan community or school health project that involves disseminating pamphlets about transmitting infections and diseases.

DELIVERY

- Discuss unit objectives

Objective 1

- Discuss terms associated with infection control practices.

- Have students play reinforcement games and work crossword puzzles using terms.

Objective 2

- Discuss conditions conducive to the growth of microorganisms.

- Discuss various practices that interfere with the growth needs of microorganisms (Methods of storing food, highly alkaline or highly acidic cleaning solutions, etc.).

- Obtain culture plates and leave them open in different locations and compare the growth. Speculate why the growth might be different.

Objective 3

- Discuss natural body defenses.

Objective 4

- Discuss factors that may alter natural body defenses.

Objective 5

- Identify the links in the chain of infection.

- Discuss the transparency masters concerning modes of transmission and the chain of infection

- Make a human chain to illustrate concept with students representing various links in the chain of infection.

- Collect a number of items such as plastic bandages, gloves, soap, insect repellant, immunization records, cleaning agents, etc. and have students identify how each serves to break the chain of infection.

Objective 6

- Discuss the inflammatory response.

- Ask students for examples of the inflammatory response such as mosquito bites, blood poisoning and other infections.

Objective 7

- Discuss nosocomial infections.

- Share your own experiences with nosocomial infections.

Objective 8

- Discuss the difference between medical and surgical asepsis.

- Make flash cards with aseptic practices on them and let students play in teams to identify whether they are medical or surgical aseptic techniques.

Objectives 9 through 13

- Discuss the steps in medical asepsis.

- Invite an infection control practitioner to speak to the class.

- Obtain isolation door cards used at clinical practice sites.

- Show videotape, *Principles of Infection Control* and/or *Current Infection Control Guidelines for Healthcare Professions.* (Alternate videotapes: *Preventing and Managing Infection Parts I and II, How Infection Strikes*, and *Internal Defenses*.)

- Discuss specific school or clinical site guidelines.

- Have students work with computer software, *Handwashing* and *Universal Precautions*.

Objective 14

- Discuss nursing responsibilities to meet the emotional needs of the isolated patient.
- Ask students to write a monologue about how it would feel to be an isolated patient.

APPLICATION

Objective 15

NOTICE: Completion of Job Sheet 3 is a prerequisite for Assignment Sheet 1.

- Discuss Assignment Sheet 1.
- Have students complete Assignment Sheet 1.

Objective 16

- Discuss Job Sheet 1.
- Share HOSA competitive event guidelines for handwashing. (Nursing Assistant Competition).
- Have students practice handwashing.
- Discuss Job Sheet 2.
- Have students demonstrate concurrent cleaning of the patient's unit.
- Discuss Job Sheet 3.
- Have students practice donning and removing isolation gear.
- Discuss Job Sheet 4.
- Have students practice double-bagging, entering and exiting isolation unit.

EVALUATION

Pretest

- Pretest qualifying students.

- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Principles of Infection Control*, available for purchase from Medcom, Inc., P.O. Box 3225, Garden Grove, CA 92642. Phone: 1-800-877-1443.
- *Current Infection Control Guidelines for Healthcare Professions*, available for purchase from Medcom, Inc., P.O. Box 3225, Garden Grove, CA 92642. Phone: 1-800-877-1443.

- *Preventing and Managing Infection*, Parts I and II. Available for purchase from Concept Media, P.O. Box 19542, Irvine, CA 92713. Phone: 1-800-233-7078.
- *How Infection Strikes* and *Internal Defenses*. Available for purchase from Films for the Humanities and Sciences, Inc., P.O. Box 2053, Princeton, NJ 08543.

Computer Software

- *Handwashing* available for purchase from Computerized Educational Systems, 307 Park Lake Circle, P.O. Box 536905, Orlando, FL 32853-6905. Phone: 305-941-6230.
- *Universal Precautions* available for purchase from Computerized Educational Systems, 307 Park Lake Circle, P.O. Box 536905, Orlando, FL 32853-6905. Phone: 305-841-6230.

Publications

- *AIDS Guidelines for Schools of Nursing*. National League for Nursing, August, 1988.
- *Handwashing*, HOSA competitive event guidelines.

UNIT REFERENCES

- Burton, Gwendolyn R.W. *Microbiology for the Health Sciences* (3rd ed.) J.B. Lippincott Company, Philadelphia, Pennsvylvania, 1988.
- Cole, Deborah. "The When and How of Isolation," *RN*, October, 1987, 50-57.
- Fong, Elizabeth and Elvira B. Ferris. *Microbiology for Health Careers* (4th ed.). Delmar Publishers Inc., Albany, New York, 1987.
- *Handwashing*, HOSA competitive event guidelines.
- Hogan, Jean and Sheila A. Sorrentino. *Textbook for Long-Term Care Assistants*. The C. V. Mosby Company, St. Louis, Missouri, 1988.
- Jorow, Marie. *The Central Service Technician at Work*. Springer Publishing Company, New York, New York, 1975.

- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures (3rd ed.).* Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed.). J. B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- Mooney, Barbara R. and Linda C. Armington. "Infection Control: How To Prevent Nosocomial Infections," *RN*, September, 1987, p 20-23.
- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques.* The C. V. Mosby Company, St. Louis, Missouri, 1986.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice.* The C.V. Mosby Company, St. Louis, Missouri, 1987.
- Rosdahl, Caroline Bunker, *Textbook of Basic Nursing* (4th ed.). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1985.
- Sloan, Jamee Reid, *Practical Nursing-Volume I.* Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.
- Sparks, Sheila M. and Cynthia M. Taylor. *Nursing Diagnosis Reference Manual.* Springhouse, Pennsylvania: Springhouse Corporation, 1991.
- Timby, Barbara K. *Clinical Nursing Procedures.* J.B. Lippincott Company, Philadelphia, Pennsylvania, 1989.
- Will, Connie A. and Judith B. Eighmy. *Being a Long-Term Care Nursing Assistant.* (2nd ed.). Prentice Hall, Englewood Cliffs, New Jersey, 1988.

OBJECTIVE 1

Match terms associated with infection control practices to the correct definitions.

- **Aerobic** — Requiring oxygen for existence
- **AFB** — Referring to the organism causing tuberculosis
- **Anaerobic** — Capable of existing without oxygen
- **Antiseptic** — A substance which prevents the growth of microorganisms and is safe to use on human skin
- **Asepsis** — Free from disease-producing organisms
- **Autoclave** — Device that uses steam under pressure to achieve sterility
- **Bacteriocidal** — Killing pathogens
- **Bacteriostatic** — Preventing the growth of pathogens
- **Center for Disease Control (CDC)** — Agency of U.S. Government concerned with disease identification, prevention, and control
- **Clean** — Relatively free of pathogenic organisms
- **Communicable** — Capable of being passed from one person to another
- **Concurrent disinfection** — Cleaning done during the period of hospitalization
- **Contagious** — Capable of being passed from one person to another
- **Contaminate** — To introduce pathogenic material
- **Disinfectant** — Substance which prevents the growth of microorganisms and kills many, but is irritating to human skin
- **Enteric** — Pertaining to the intestines

- **Infection** — Disease state caused by pathogenic organisms
- **Inflammation** — Response of the body to foreign substance characterized by redness, heat, pain, and swelling
- **Isolation** — Set apart from others in some manner
- **Medical asepsis** — Practices that prevent the spread of pathogens
- **Microorganism** — Living being that can be seen only through a microscope; some may be disease-producing
- **Nosocomial infection** — An infection acquired during hospitalization
- **Pathogenic** — Disease-producing
- **Phagocyte** — A cell of the body capable of surrounding and engulfing foreign material
- **Portal of exit** — Point at which an organism may leave the body
- **Portal of entry** — Point at which an organism may enter the body
- **Reverse, Protective or Neutropenic isolation** — Steps taken to prevent transmission of infection to an individual with poor resistance
- **Spore** — A dormant state that some pathogens can assume when growth conditions are not favorable
- **Sterile** — Free of all organisms and spores
- **Surgical asepsis** — Steps taken to maintain sterility
- **Terminal disinfection** — Cleaning process undertaken when patient leaves the hospital
- **Universal precautions** — Protective measures carried out with all patients to prevent transmission of organisms through blood and body fluids

OBJECTIVE 2

Select the word or phrase that completes statements about microorganism growth.

There are a number of types of microorganisms that can cause infection. They may be classified as bacteria, viruses, protozoa or fungi, but all can be pathogenic. If we know what conditions are favorable to their growth, we can manipulate these conditions and stop their growth.

- All need a source of food.
  - Our food is also an excellent food for many pathogenic organisms. For example, we associate the salmonella organisms with poultry and with eggs. Mold grows on food left in the refrigerator too long, and the staphylococcus organism flourishes in cream pies and potato salad.
  - The interior of the human body is also conducive to the growth of many microorganisms. The blood stream and the interior of cells offer an excellent medium.
- Moisture is a requirement for microbial growth.
  - Again, the interior of human beings, as well as other animals, provides moisture because all cells are bathed in fluid. Damp, wet areas in the environment may also be a breeding ground for pathogens.
- Microorganisms have specific needs in relation to oxygen.
  - Most microorganisms require oxygen just as human beings do. We describe these organisms as aerobic. Oxygen and aerobic organisms can be found in all body cells.
  - Some microorganisms can exist without oxygen. These are called anaerobes and can be found on dead or decaying material where supplies of oxygen are limited.
- Temperature plays a part in the life of microorganisms.
  - Temperatures similar to body temperature are conducive to the growth of pathogens. Extreme heat or extreme

cold will inhibit the growth or kill microorganisms. Freezing will at least limit growth and boiling will kill many organisms.

- Certain conditions of light must be met for microbial growth.
  - A dark environment is more favorable for pathogen growth. This makes the dark interior of the human body a good environment. Ultraviolet light, found in sunlight, will kill or inhibit pathogens.
- The chemical environment or the pH of a substance will stimulate or inhibit the growth of microorganisms.
  - Microorganisms prefer a nearly neutral pH of 6-8. Blood, urine and other body secretions fall into this range. The stomach has a highly acid pH of about 2 which will help to control potential pathogens entering on the food eaten. Many cleaning substances have highly alkaline or highly acid reactions to control the growth of pathogens in our environment.

Many of our actions to prevent infection are directly related to the growth needs of microorganisms. We try to create an unfavorable environment for pathogens in order to protect humans.

OBJECTIVE 3

Select the word or phrase that completes statements about natural body defenses and their maintenance.

Fortunately for us, the human body has a number of defenses to protect us from the potentially pathogenic organisms present in our environment. In many cases, it is the nurse's responsibility to help keep these defenses intact for the patient.

- **Skin** — The first defense; an unbroken skin is a very important barrier for keeping pathogens from the inner areas of the body.
- **Mucous membranes** — Line the interior passages of the body and provide another barrier. Once again, this barrier must be intact to be effective.
- **Hair** — Hair on or within the body, such as the tiny hairs of the nose, aids in trapping material which could carry pathogenic organisms into the body.

- **Reflex mechanisms** — Help rid the body of unwanted and harmful substances. Sneezing, coughing, blinking, tearing and vomiting all perform useful functions even though they may be unpleasant or inconvenient when occurring.

- **Body cell replacement** — Helps combat invading pathogens. Our cells, and our defenses, are constantly being replenished. The ongoing shedding of the outer layer of the skin is especially important in ridding the body of pathogens found there.

- **The rapid movement of the small intestine** — Discourages the growth of pathogens. Growth would more likely occur if movement were slow.

- **Body secretions** — The various secretions serve to create a barrier and aid in removing or discouraging the growth of microorganisms. Secretions important in controlling pathogenic growth are:

  - Saliva — Washes away particles
  - Tears — Washes away particles
  - Mucus — Creates a barrier and washes away particles
  - Perspiration — Washes away particles
  - Urine — Washes away particles
  - Gastric secretions — Discourages growth with highly acid pH

- **Phagocytosis** — The ability of certain types of cells to surround or engulf foreign organisms that invade the area. This process can occur in the blood stream with white cells acting as phagocytes and at several places in the body, including the alveoli of the lungs.

OBJECTIVE 4

Select factors that may alter natural body defenses.

Our bodies have wonderful defense mechanisms to prevent various infections from occurring, but there are situations when these defenses are compromised. If we can recognize these situations, we can protect ourselves and our patients. Careful consideration should be given to the following factors.

- **Nutritional status**

  A well-balanced diet provides all the nutrients to protect the body. When the diet is faulty, the body is less capable of protecting itself. Some patients are unable to eat or to eat a sufficient variety of foods because of disease. This makes them more susceptible to infection. Others do not eat adequately because of choice or lack of knowledge.

- **Age**

  The very young and the very old are at greater risk for infection because their immune systems are not fully functional. Another important barrier, the skin, is thinner and more fragile in both age groups.

- **Poor personal hygiene**

  Good personal hygiene measures aid in keeping our natural defense mechanisms at peak efficiency. When an individual is incapable or unwilling to practice appropriate hygiene measures, defenses are compromised.

- **Physical or emotional stress**

  The body's reaction to stress can decrease resistance to infection. Physical stress such as injury or surgery can be at fault. Emotional stress can also put a strain on the body's defenses. Thus patients' worries about the outcome of surgery, finances, or family problems can place them at increased risk of infection.

- **Illness**

  A person already ill cannot cope well with additional pathogens. Thus we see an individual with a cold developing pneumonia. This is particularly true when one of the other factors such as age or poor nutrition is also present.

- **Medical treatment**

  Some medical treatments will actually increase the risk of infection. Any type of invasive treatment that involves entering a body cavity or puncturing the skin, increases the risk of infection. Radiation treatment for cancer destroys good as well as bad cells and increases the risk of infection.

- A number of medications can have adverse effects on the body's ability to withstand the invasion of pathogenic organisms. Antibiotics may disturb the normal flora or balance of organisms growing in an area, allowing an opportunist pathogen to overgrow and cause infection. This frequently happens in the large intestine, causing diarrhea.

- Administration of steroids interferes with the body's inflammatory response. Chemotherapy agents used in the treatment of cancer depress white cell counts and prevent the important mechanism of phagocytosis from functioning.

OBJECTIVE 5

Explain the links in the chain of infection.

The steps in the process of transmission of disease are known as *the cycle or chain of infection*. It is our purpose to break this chain and prevent infection, so we must be able to identify the six steps. in the chain.

- **Presence of a microorganism**

  This is also called the *causative organism* or the *infectious agent*. This is the specific microorganism which could cause an infection. The organism could be a virus, bacterium, fungus, protozoa, rickettsiae, mycoplasma or chlamydia.

- **Reservoir**

  This is the site where the organism can grow and multiply. A reservoir or source must satisfy the organism's growth needs. Human beings, animals, insects, food, water, or inanimate objects could all be a reservoir. Characteristically, different organisms prefer different reservoirs based upon their unique growth requirements.

- **Portal of exit**

  The organism must have some way to leave the reservoir. This is especially true when the reservoir is a living being. Any natural or artificial body opening can allow a pathogen to escape. The mouth, nose, urinary meatus, vaginal orifice, and the other natural body openings become portals of exit, as do surgical wounds and accidental cuts.

- **Mode of transmission**

  When the organism leaves the reservoir, there must be some means of transfer to the potential victim. The following are possible modes of transmission.

  — **Contact**

  Contact between two living organisms may spread pathogenic organisms. This contact may take several forms:

  Direct contact — Touching, kissing, or sexual contact

  Droplets — Spread disease by coughing or sneezing

  Indirect contact — Contact with contaminated materials

  EXAMPLES: Soiled dressings, tissues, needles, drinking glasses or silverware

  — **Air**

  Pathogenic organisms can be spread in the air through either residue of droplets or dust.

  — **Vehicle**

  A vehicle is an inanimate object that can carry pathogenic organisms.

  EXAMPLES: Food, water, blood

  — **Vectors**

  Vectors are live creatures that transfer pathogens.

EXAMPLES: Flies, mosquitos, lice and ticks. Cows and pigs may also be vectors in some diseases.

- **Portal of entry**

  The portal of entry is the route the organism takes into the body. Any opening which can serve as a portal of exit can also serve as a portal of entry.

- **Susceptible host**

  Microorganisms are always present. A person may be able to withstand large numbers of pathogens until one of his body defenses is compromised. Then he is susceptible and an infection may result.

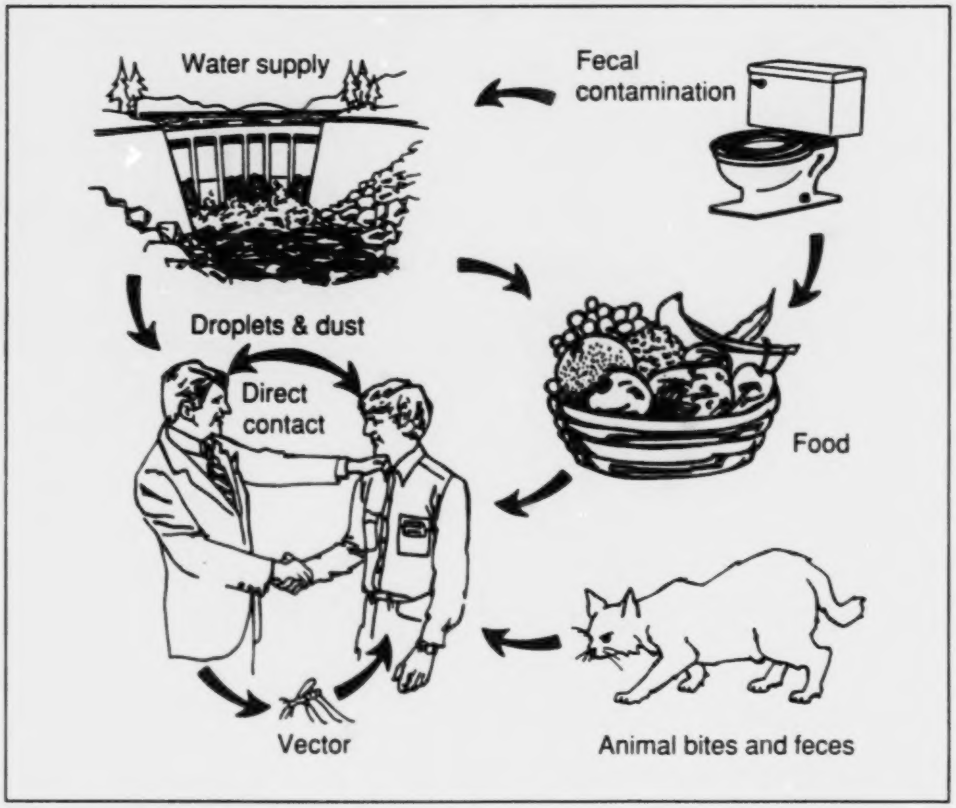

Water supply
Fecal contamination
Droplets & dust
Direct contact
Food
Vector
Animal bites and feces

Figure 1 Chain of Infection

OBJECTIVE 6

Select the word or phrase that completes statements about the mechanism and purposes of the inflammatory response.

When pathogenic organisms do invade the human body, the body responds by attacking the organisms. The signs that tell us this attack is occurring is called the inflammatory response.

Inflammation is a local reaction, meaning it occurs at the site of the invading organism and not throughout the whole body. There are four major signs of inflammation: redness, swelling, heat, and pain. There may also be loss of function of the part involved.

Blood flow increases, bringing more cells to serve as phagocytes and more nutrients to the area. The increase of fluids to the area accounts for the redness, swelling and heat. Pain may be a result of swelling or of actual tissue damage.

The inflammatory response serves to:

- Localize the damage and prevent the spread of the pathogen
- Neutralize or destroy the pathogen
- Repair damaged tissue

There may be fluid or exudate, such as pus or purulent material, produced by the process. This exudate contains dead white cells as well as living and dead pathogenic organisms.

The inflammatory response can be a signal that an organism is trying to invade the body as well as a signal that steps need to be taken to aid the body in every way possible in its fight against the organism.

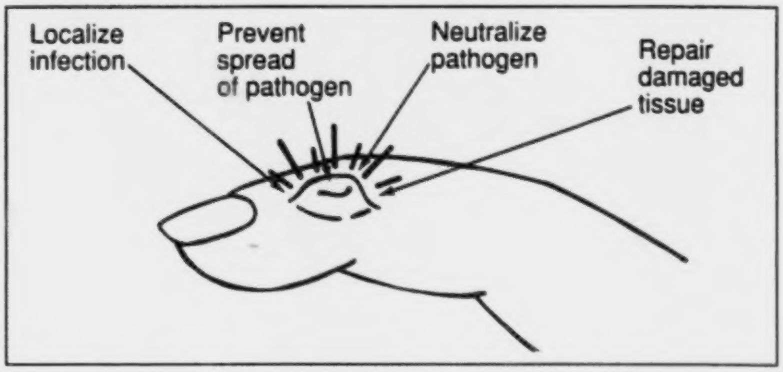


Figure 2 Inflammatory Response

OBJECTIVE 7

Select the word or phrase that completes statements about nosocomial infections.

Nosocomial infections are infections acquired in the hospital during treatment. It has been said that 5% of all hospitalized patients acquire such an infection. This adds to the length of hospital stays and increases the cost of hospitalization. Billions of dollars are spent in the United States because of nosocomial infections. We can't forget the additional possibility of stress and pain which the patient may have to endure when a nosocomial infection occurs.

Urinary tract infections make up about 40% of all nosocomial infections. Most are associated with the use of indwelling catheters. Respiratory infections, wound infections, and infections associated with IV lines are other examples of nosocomial infections.

Typical scenarios for a nosocomial infection would be a patient who has had a repair of a broken hip and develops a urinary tract infection with the use of an indwelling catheter or a patient who has had surgery and develops pneumonia post-operatively.

Nurses must use medical and surgical aseptic techniques to prevent these infections. Body defenses are altered during hospitalization, putting a greater responsibility on the nurse to protect the patient.

OBJECTIVE 8

Distinguish between medical and surgical asepsis.

Medical asepsis refers to measures used to limit the growth and spread of microorganisms. We also refer to medical asepsis as techniques used to keep an area as "clean" as possible. Clean in the medical sense refers to objects and areas which are relatively free of pathogenic organisms.

Dirty, on the other hand, refers to objects or areas which are known to be contaminated with pathogenic organisms. Tissue pulled directly from the box should be clean. After use by the patient to blow his nose, the same tissue is dirty. Before use we expect it to be relatively free of pathogens. After use, we can be certain that pathogens are present.

Soap and water, antiseptics, disinfectants, and the manner in which items are handled all make up the practice of medical asepsis. It is what we do on a continuing basis to keep ourselves and our patients free of pathogenic organisms. When body defenses are intact, medical asepsis protects us adequately.

Surgical asepsis, refers to the practice of sterile technique. Sterile means free of **all** organisms **and** spores. Methods of sterilization in the health care field include boiling, autoclaving (the use of steam under pressure), and gas sterilization using ethylene oxide. Only objects can be sterilized. No part of the human body can undergo techniques to ensure sterility. Once an object is sterilized, it is handled in certain ways to avoid contamination.

Sterile technique is used during surgical procedures, for procedures that break the skin such as an injection, and for procedures where sterile body cavities are entered, such as during catheterization.

While sterile procedures are extremely important for infection control at certain times, the focus of this unit is on medical asepsis or clean technique. For our own protection and the protection of our patients, we must know and use practices consistent with good medical asepsis.

OBJECTIVE 9

Select appropriate personal hygiene measures for the nurse to ensure medical asepsis.

When assessing a patient, the nurse must take into account the person's natural body defenses and any factors that might have altered their efficiency. Any signs of inflammatory response should be identified as well as any infections present.

Analysis of the assessment data will help the RN see any areas of concern in relation to infection. The medical diagnosis and nursing diagnosis will both be considered for care planning and interventions.

In planning nursing care, the nurse must include measures to prevent infection or keep infection from spreading. Goals are written to reflect these concerns.

Interventions to ensure medical asepsis and protect the patient, the nurse, and other patients are instituted.

Evaluation should reveal a patient free of nosocomial infection. Any existing infection should be improved and limited to that patient only.

The interventions begin with the nurse's personal hygiene.

- Wear clean uniforms daily and reserve uniforms for work only.

- Keep hair clean and secured in a style which prevents contamination of the work area.
- Bathe frequently to minimize the growth of microorganisms on the skin.
- Keep fingernails short and clean to discourage the growth of microorganisms under the nails. Avoid chipped nail polish which may provide a place for microorganisms to grow.
- Avoid wearing jewelry in the clinical area. Engagement and wedding bands are usually considered acceptable, but even they may offer a hiding place for microorganisms.
- **WASH HANDS FREQUENTLY.** This is the single **MOST IMPORTANT** step in maintaining medical asepsis. Handwashing should be carried out:
    - Before beginning patient care
    - Between patients
    - Before any procedure including before applying gloves
    - After removing gloves
    - Before eating or assisting the patient to eat
    - After using the bathroom
    - After assisting the patient with the bedpan or urinal
    - After blowing or wiping nose
    - After handling contaminated supplies
    - Before handling clean supplies
    - Before leaving the clinical area.

OBJECTIVE 10

Select appropriate personal hygiene measures for the patient to ensure medical asepsis.

Adequate attention to the patients' personal hygiene helps maintain their body defenses.

- Offer opportunities for patients to practice handwashing before eating, after using the bedpan or urinal, after handling tissue for coughing or sneezing, or at any other times when the hands may be contaminated.
- Keep items such as toothbrushes, drinking glasses or similar items clean and stored where they will not be contaminated.
- Provide tissue to avoid the spread of droplets.
- Clean any soiled areas on the body promptly, using correct technique.
- Encourage the use of slippers or other adequate footwear to prevent contamination of bed linens with organisms from floor.

OBJECTIVE 11

Select the word or phrase that completes statements about measures to maintain concurrent disinfection.

Linen

Practice concurrent disinfection of the patient's unit. This means keeping the patient's immediate surroundings free of pathogenic organisms.

Handle linen appropriately. This includes:

- Keep doors to linen rooms closed or linen carts covered to avoid contamination by dust or airborne microorganisms.
- Wash your hands before handling clean linen.
- Keep clean and dirty linen separate.
- Linen removed from the linen room or cart is considered contaminated. Do not return linen to either of these areas after it has been in the patient's room.

- Do not shake or throw linen since this releases microorganisms into the air.
- Discard any linen that drops on the floor. The floor is always considered highly contaminated.
- Do not carry linen next to the body. Dirty linen contaminates the uniform, and clean linen is contaminated by the nurse's uniform.
- Avoid contact with linen; do not smooth it with your hands or reach across it so that your body or uniform touches it.

Equipment

In order to make sure that equipment used for patient care is uncontaminated, the nurse should:

- Use as much disposable equipment as possible.
- Use equipment for one patient only before it is discarded, cleaned, or sterilized.
- Store clean equipment correctly in clean, dry area where it will not be contaminated.
- Keep clean and dirty equipment separated. Take dirty equipment to the appropriate area to await cleaning or sterilization.
- Do not use any equipment if its cleanliness or sterility is in doubt.

Cleaning techniques

- Use appropriate cleaning methods
    - Linens, glass, metal, and hard plastics may be sterilized. Rubber items, soft plastics, and items such as glass thermometers, stethoscopes, and blood pressure cuffs are only disinfected.
    - Even items that will be sterilized must be cleaned first. When organic material is present, the item should first be rinsed with cold running water to prevent coagulation or

hardening of the material. Then the item can be cleaned using friction and a disinfectant solution.

  - Items such as ice bags that are used for more than one patient should be cleaned between patients by washing with a disinfectant solution. Blood pressure cuffs should be wiped off with a cloth wet with a disinfectant solution. Stethoscopes should be wiped frequently with alcohol swabs, especially if any contaminated material touches them.

  - Clean areas such as bathtubs, showers, and sitz baths with a disinfectant before and after patient use.

- Use appropriate cleaning agents.

  - Antiseptics are used on skin and are bacteriostatic.

    EXAMPLES: Alcohol, povidone iodine, and hydrogen peroxide

  - Disinfectants are too harsh for human skin and are used to clean items in the environment. Disinfectants are certainly bacteriostatic and also bacteriocidal for many organisms. They are not able to eliminate spores.

    EXAMPLES: Compounds containing phenol or iodine

  - A 1:10 solution of bleach is recommended to clean blood spills.

Disposals

- Dispose of contaminated materials correctly.

  - Wear gloves when emptying bedpans, urinals, or emesis basins.

  - Place needles directly into a sharps container without recapping.

  - Place contaminated materials such as soiled dressings, urinary catheters, or anything else with body secretions or excretions into a plastic-lined trash receptacle.

OBJECTIVE 12 **Select the word or phrase that completes statements about barrier techniques used for infection control.**

Barriers such as gloves, gowns, masks, goggles, or closed doors separate infectious material from uninfected areas. Isolation precautions involve using appropriate barriers to protect from specific diseases or disease categories. These precautions are established by the Center for Disease Control (CDC) to assure standardization of procedures and adequate protective measures.

Seven categories are identified by the CDC. An eighth category called reverse or protective isolation is no longer considered useful by the CDC, but may still be practiced in some health care facilities. These categories are based on the mode of transmission of causative organisms.

When a patient is placed on isolation precautions, a card is placed on the patient's door to indicate the procedure to be used and the specific steps to be taken for that isolation category. An alternate approach is disease-specific isolation where a card with a check list of all possible steps is placed on the door. The steps which apply to that particular patient and his disease are then checked. Both category and disease-specific isolation have been devised by the CDC. The chart on isolation categories in Objective 13 describes each.

Two blood-borne diseases make one isolation category extremely important in today's health care settings. AIDS and Hepatitis B are constant threats to health care workers. The steps in the blood and body fluids category should be practiced continually and for every patient. These steps have become known as *universal precautions*.

In response to the current threats to health care workers, some agencies have adopted body substance isolation which is an expansion of blood and body fluid precautions.

These steps protect the health care worker from disease and they protect the suspected AIDS patient from labeling. The following recommendations have been distributed by the National League for Nursing based on CDC recommendations. They are directed specifically at the AIDS or HIV virus, but apply equally to Hepatitis B.

RECOMMENDATIONS FOR HEALTH CARE WORKERS*

- Use of blood and body fluid precautions for all patients, since medical history and examination cannot reliably identify all patients infected with HIV and other fluid- or blood-borne pathogens.
- Use of special precautions during pre-hospital and emergency care since the risk of blood exposure to health care workers is increased and the infection status of the patient is usually unknown.
- Use of appropriate barrier precautions to prevent exposure to skin and mucous membranes when contact with blood or other body fluids is anticipated.
- Gloves should be worn when in contact with blood, body fluids and mucous membranes and for handling items or surfaces soiled with blood or body fluids, or for performing venipuncture and other vascular access procedures.
- Masks and protective eyewear or face shields should be worn during procedures that are likely to generate air-borne droplets of blood or other body fluids to protect exposure of mucous membranes of the mouth, nose, and eyes.
- Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other body fluids.
- Use caution to prevent injuries caused by needles, scalpels, and other sharp instruments. To prevent needle-sticks, needles should not be recapped, purposely bent or broken by hand. After use, sharps should be placed in puncture-resistant containers for appropriate disposal.
- Although saliva has not been implicated in HIV transmission, minimize the need for emergency mouth-to-mouth resuscitation by making resuscitation bags, mouth pieces, and ventilation devices available in areas in which the need for resuscitation is predictable.
- Health care workers with open lesions or weeping dermatitis should refrain from all direct patient care and from handling equipment until condition resolves.
- Change gloves after caring for each patient, as glove integrity cannot be assured with washing and repeated use.
- Wash hands prior to and immediately after patient contact.

*Source: Centers for Disease Control

OBJECTIVE 13 | Match isolation categories with methods of transmission, examples of diseases and protective measures.

CHART OF ISOLATION PRACTICES

ISOLATION CATEGORY	METHOD OF TRANSMISSION	EXAMPLE OF DISEASES	PROTECTIVE MEASURES
Strict	Long distance through air contact	Chickenpox Smallpox Diphtheria	Private room with door closed Mask Gown Gloves
Contact	Direct contact Short distance through air	Rubella Impetigo Scabies Respiratory infections of young children	Private room Gown Gloves Masks for close contact
Respiratory	Short distance through air	Mumps Measles Meningitis	Private room Mask
AFB (Acid-fast bacillus)	Contact with droplets	Tuberculosis	Private room Mask Gown if soiling from pulmonary secretions likely
Enteric	Contact with feces	Hepatitis A Gastroenteritis	Gloves Gown is soiling is likely
Drainage/Secretion Precautions	Direct or indirect contact	Infected burns Skin infections Wound infection	Gloves Gown if contact with drainage is likely
Blood/Body Fluids	Contact with blood or body fluids	AIDS Hepatitis B	Gloves Gown if contact is likely
Body Substance	Contact with blood, secretions, mucous membranes, broken skin, moist body substances	Wide range of conditions	Gloves Gown Apron Mask Goggles (All chosen for specific need at discretion of health worker)
Reverse, Protective or Neutropenic	Protects patient with lowered immunity from workers and other patients. The patient is placed in a private room with the door closed. Nurses wear gowns, gloves (sterile for many procedures), and masks to protect the patient. No longer recognized by CDC or practiced in many facilities, but may still be practiced in others.		

OBJECTIVE 14

Select from a list nursing responsibilities to meet the emotional needs of the isolated patient.

While there are many physical actions to assure that isolation technique is adequately practiced, we must consider the emotional needs of patients requiring isolation. They may experience loneliness since they have fewer contacts with others. Such elaborate measures may heighten their fears about the illness and the prognosis. The nurse must take steps to ensure the patients' emotional well-being as well as their physical well-being.

- The nurse should give patients a careful explanation of the techniques used and the reasons for them, emphasizing that the organism and not the patient is being isolated.
- Answer patients' questions. Explanation and dialogue may help secure their cooperation.
- Make a point of spending time with patients rather than delivering physical care and quickly leaving.
- Visitors should be encouraged, within the limits of the health care agency. The visitors will have to be instructed in necessary techniques.
- Other diversionary activities should be provided as appropriate. Television is available in most patient rooms. Depending upon the type of isolation, it may not be possible for some items to be removed from the room once they are taken to the patient.

In short, all the patient's needs should be considered and not just the ones relating to the infection. Patients should not be made to feel dirty or deserted because of the disease process.

TERMINAL DISINFECTION

The nurse is not usually directly responsible for performing terminal disinfection or the cleaning of the patient's unit after discharge. However, the nurse should be aware of some of the principles and steps to assure that those performing the cleaning are doing it completely and correctly. In most health care agencies, terminal disinfection is the responsibility of the housekeeping department.

Some of the important considerations in the process are:

> Gloves are worn for the procedure
>
> Strong disinfectant solutions are used for cleaning
>
> Cleaning is always done from cleaner to dirtier surfaces.
>
> The unit is thoroughly searched to assure that none of the patient's belongings remain. If any are found, they are labeled and placed in a secure place. Follow policy for notification of patient or further disposition.
>
> Since most utensils such as bedpans and bath basins are disposable, any that the patient does not take are discarded. If items are not disposable, they are removed for sterilization before they are used again.
>
> Soiled linen is removed one piece at a time to search for any patient belongings. Avoid contamination by touching linens to uniform or by shaking or throwing linens. Linens are removed from the unit and placed in a receptacle for dirty linens.
>
> All surfaces of the bed are thoroughly washed with disinfectant solution to remove any microorganisms left by the patient and any dust which could carry microorganisms. This includes both sides of the mattress, the springs and bed frame, siderails, any controls for the bed, the headboard and footboard. The pillow is also washed off.
>
> All furniture in the room is thoroughly washed. Drawers or compartments inside bedside and overbed tables should be included. Chairs are washed along with items such as light switches and door handles.

Areas such as tops of overbed lights and doorsills are dusted.

The floor is thoroughly cleaned.

Clean linen is applied to the bed without contaminating the linen.

USING AN AUTOCLAVE

The autoclave is one of the most common methods used for sterilization of materials. It uses the principle of steam under pressure, much like a pressure cooker. In the hospital, most sterilization is done in a central area such as a Central Supply department. The nurse is not usually involved in these procedures. However, small autoclaves may be found in doctor's offices and the nurse may have the responsibility for sterilizing materials.

The exact procedure depends upon the equipment, but certain principles are used in any situation.

> Use the correct temperature, steam pressure, and time for the item to be sterilized. (Temperature may range from 250-270 degrees F. Pressure may range from 15-30 pounds per square inch. Time may range from 3-30 minutes.) Consult an instruction manual for exact settings.
>
> Items to be autoclaved must be clean.
>
> The autoclave should not be crowded or items piled on one another. Steam must circulate freely.
>
> Trays, basins and jars should be placed on their sides so moisture will flow out instead of accumulating inside the container.
>
> Articles should not touch the walls of the chamber.
>
> When the cycle is completed, do not open the door until the pressure gauge reaches "O".
>
> Stand back and "crack" the door only slightly open to avoid burns from steam remaining in the chamber.
>
> Allow items to dry 15 to 20 minutes inside the autoclave with the door open about 1/2 inch.
>
> Wrapped articles must be thoroughly dry before being handled.

Follow the exact instructions for the specific autoclave to ensure your safety and sterility of the materials.

CORRECT TECHNIQUES FOR PERFORMING VARIOUS PROCEDURES IN THE ISOLATION UNIT

INTRODUCTION

Even though a patient may require isolation precautions, he still will need a number of other nursing procedures completed. Some variation may be necessary in order to maintain the isolation precautions. The exact measures will depend upon the organism and disease being isolated. Generally, the following measures are for the strictest of isolation procedure.

EQUIPMENT AND SUPPLIES

- Isolation cart outside door containing gowns, masks, gloves, isolation bags (usually red), fasteners for bags, labels, marking pen
- Private room with toilet and sink
- Instruction card for door
- Soap dispenser
- Paper towels
- Plastic-lined trash container
- Linen hamper with liner
- Sharps container for disposal of needles
- Disposable personal care utensils (Bath basin, emesis basin, water pitcher, drinking glass, etc.)
- Alcohol wipes
- Thermometer (Electronic thermometer is sometimes used.)
- Stethoscope (One is not always provided for isolation unit.)

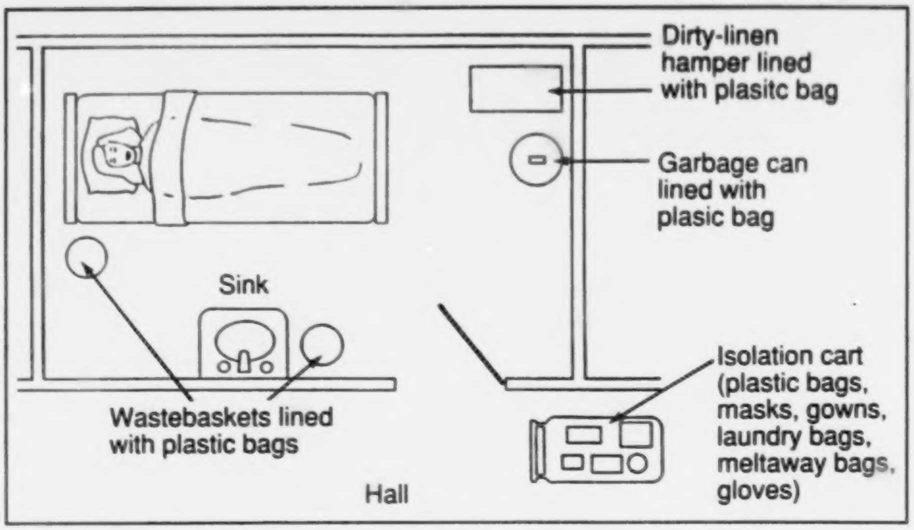

Dirty-linen hamper lined with plasitc bag
Garbage can lined with plasic bag
Sink
Isolation cart (plastic bags, masks, gowns, laundry bags, meltaway bags, gloves)
Wastebaskets lined with plastic bags
Hall

Figure 3 Isolation Unit*

PROCEDURE

Assessment and Analysis

1. Check medical diagnosis to determine the exact type of materials needed.
2. Check nursing diagnoses to determine specific needs of patient.
3. Check agency policy manual to determine specific procedures.

Planning

4. Assemble all equipment.

   NOTE: Be certain all necessary items are present to avoid coming back out of isolation unit.

Implementation

Entering unit:

5. Wash hands.
6. Don protective gear indicated by type of isolation.

*Source: Hogan/Sorrentino: *Textbook for Long-Term Care Assistants*, St. Louis, ©1988, The C.V. Mosby Company. Used with permission.

7. Place any equipment being brought into room on clean paper towel to avoid contamination.

   NOTE: Take in only supplies that will be used since items will have to be discarded or thoroughly cleaned before use by another patient.

Vital signs:

8. Upon entering room, remove watch and place on clean paper towel or place in plastic bag.

   NOTE: If wall clock with second hand is available in room, it should be used.

9. If stethoscope must be brought in, hang on door handle away from patient or lay on paper towel until ready for use.

10. When using stethoscope, ensure that it will have only minimal contact with patient.

11. After use, lay stethoscope on paper towel or other clean surface and swab with alcohol wipe

12. When leaving room, open plastic bag, drop watch on clean surface. Pick up after washing hands.

Personal care:

13. Provide personal care as usual, but while wearing all necessary protective gear.

14. Avoid getting disposable gown wet since this contaminates clothing beneath.

15. Place all linens in lined linen hamper in room.

16. Place all trash in lined trash receptacle in room.

Collecting specimen:

17. Leave cover of container on isolation cart outside of room.

18. Place specimen container on clean paper towel.

19. Have patient void in bedpan or urinal or collect appropriate specimen.

20. Pour urine into container without splashing urine on outside of container or touching container in any way. Transfer stool specimen using tongue blades.

21. Clean and store bedpan, urinal or other equipment used.

22. Remove garments and wash hands.

23. Carry container outside room, being careful not to splash urine.

24. Place lid on container and place entire container in plastic bag labeled as isolation specimen.

Signing document:

25. Lay document to be signed on clean paper towel.

26. Have patient place hand on paper towel protecting document below site for signature during signing.

27. Pick up the paper with clean hands and remove it from the room.

Transporting patient outside unit:

28. Place gown and mask on patient.

29. Place clean sheet or bath blanket over wheelchair or stretcher.

30. Place second sheet or blanket, completely opened, over first. Place patient in wheelchair or stretcher and wrap as completely as possible with second blanket.

31. Make sure people in department where patient is being transported are aware of patient's diagnosis and isolation precautions.

32. Arrange for transport at a time when the patient will not come into contact with a large number of people.

33. Upon the patient's return, place linen in receptacle in room.

34. Follow agency policy concerning disinfection of wheelchair or stretcher.

Removing items from room:

35. Arrange for an assistant to work outside the room.

36. Follow instructions for double bagging.

Leaving room:

37. Remove protective gear using correct technique.

38. Wash hands.

39. Use clean paper towel to open door.

40. Dispose of towel in receptacle outside room.

41. Wash hands.

Evaluation

a. Care was given without contaminating persons or equipment.

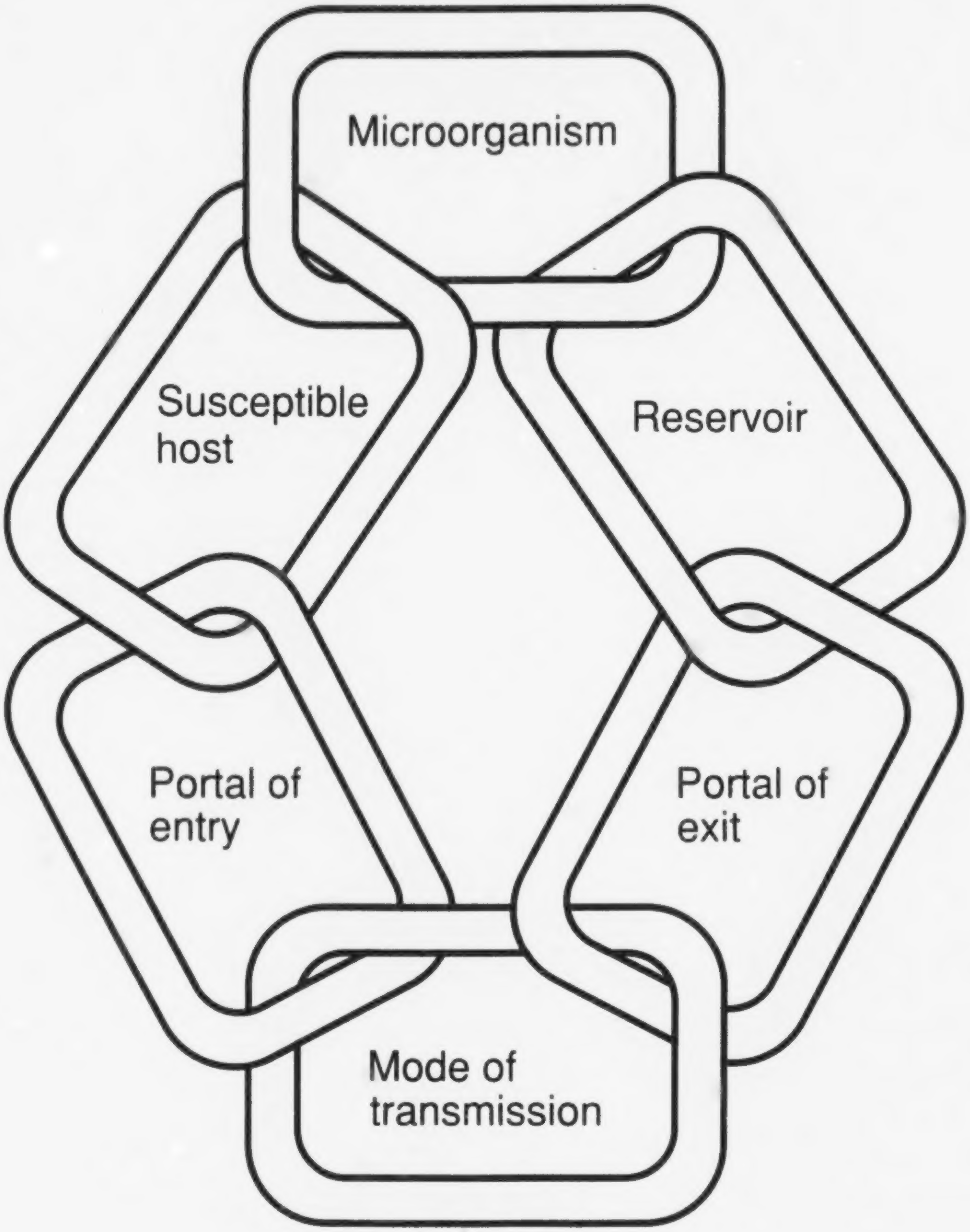
b. All contaminated materials were discarded or removed from unit using double-bagging technique.

c. Patient is comfortable and isolation unit is neat and clean

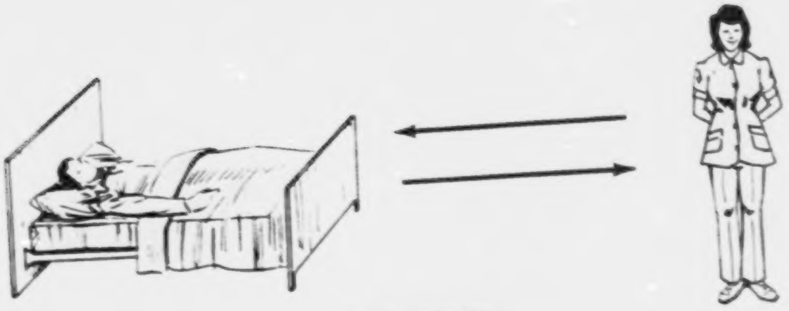
Documentation

Follow agency policy in documenting each procedure as appropriate.

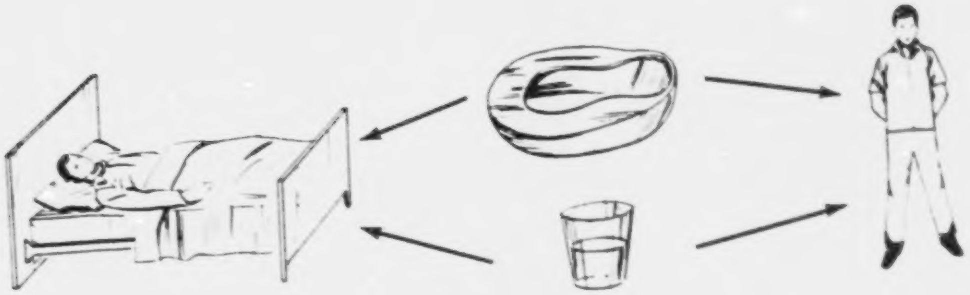
Chain of Infection


Microorganism
Reservoir
Portal of exit
Mode of transmission
Portal of entry
Susceptible host

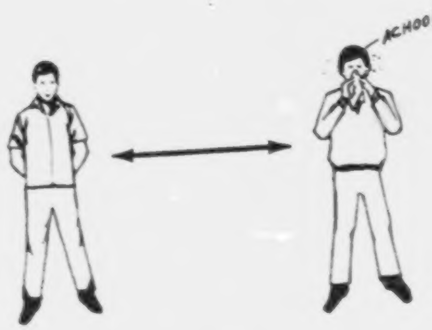
Ways Organisms Are Spread by Contact



DIRECT

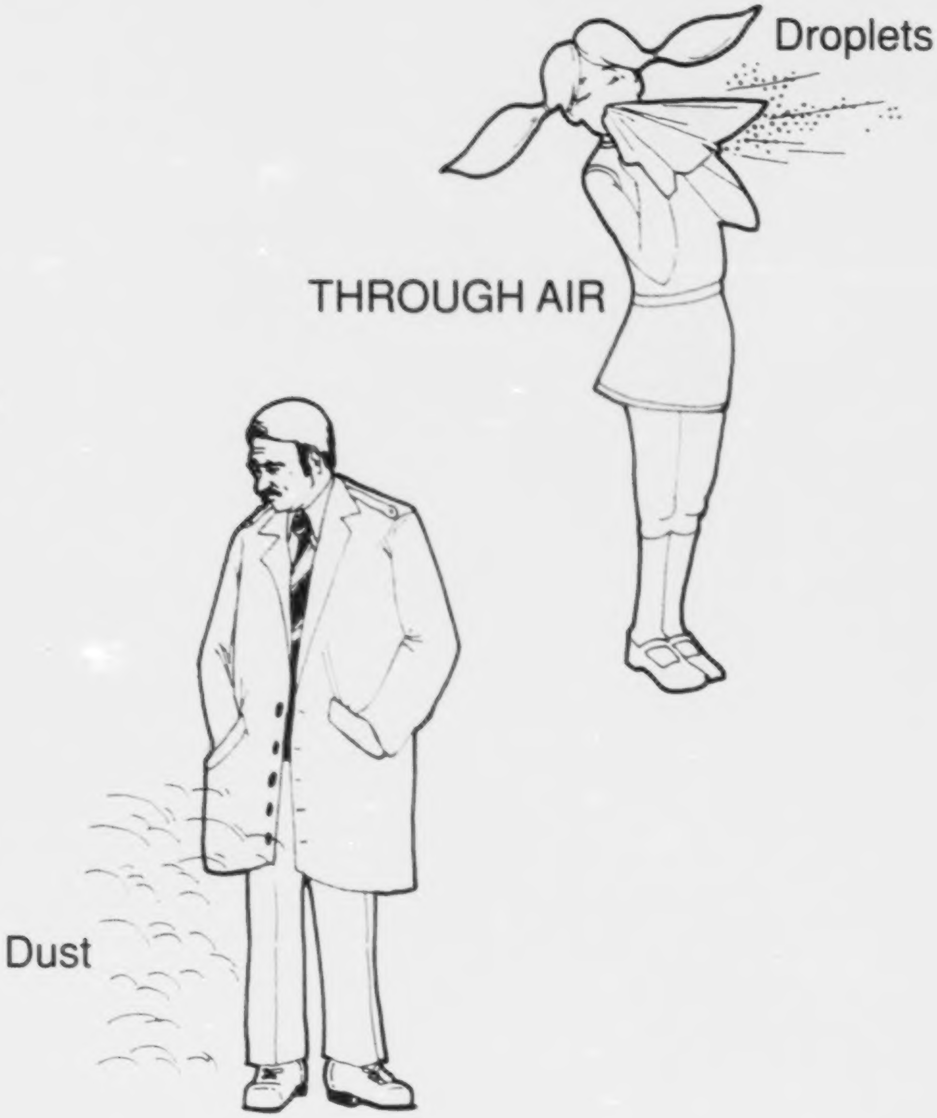


INDIRECT

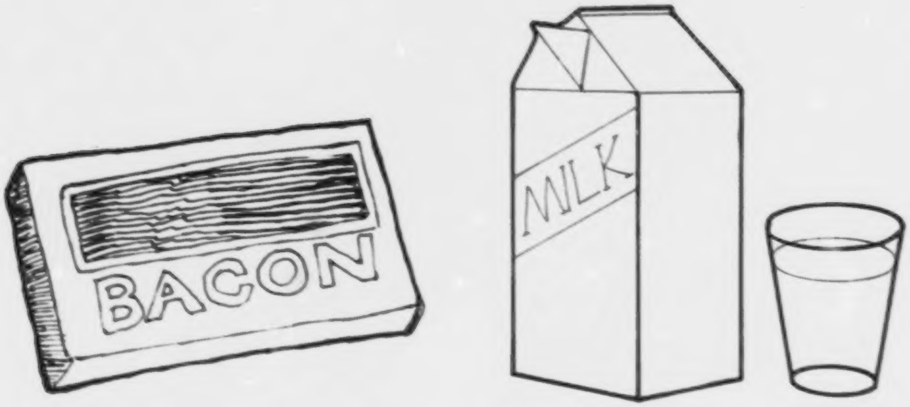


DROPLET

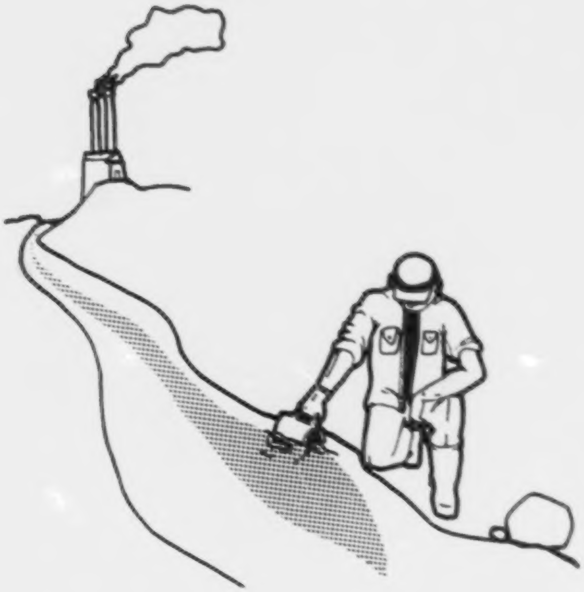
Ways Organisms Are Spread Through Air


Droplets
THROUGH AIR
Dust

Ways Organisms Are Spread by Vehicles

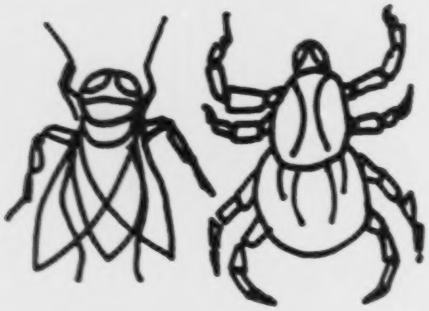


FOOD

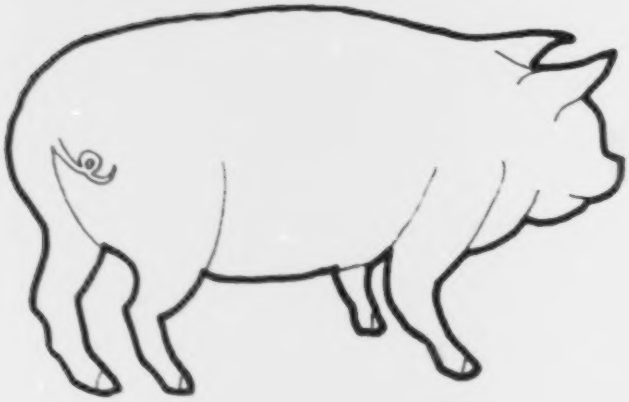


WATER

Ways Organisms Are Spread by Vectors



INSECTS, MITES, AND TICKS



COWS AND PIGS

ASSIGNMENT SHEET 1

USE INFECTION CONTROL TECHNIQUES

IV

NAME ______________________ SCORE ________

OBJECTIVE 15 **Develop a teaching plan for the isolated patient.**

INTRODUCTION When patients must be isolated, the nurse can help alleviate their fears by explaining techniques that will be used and the reasons for them. Explanation and dialogue with patients will help secure their cooperation.

NOTE: You must complete Job Sheet 3, *Use the correct technique to don and remove isolation gear*, before you can complete this assignment sheet.

DIRECTIONS Read the following scenario and answer the questions below.

Reading Comprehension Skills
- Gain factual information

Functional Reading Skills
- Interpret graphics and symbols

Life Science Skills
- Investigate health issues (medical)

Sarah, a six-year old, is in the hospital for treatment of pneumonia when she breaks out with chickenpox (varicella). Immediately steps are taken to isolate her. You need to teach Sarah and her parents about the isolation precautions. They have many questions and concerns which need explanation. Use the information from Objectives 12, 13, 14, and 15 to develop your teaching plan.

1. What type of isolation will be used for Sarah?

2. What protective gear will be worn?

5. Sarah's parents are very anxious and want to know if Sarah should have any visitors.

6. Sarah's parents want to know if isolation means that Sarah will be ignored by the nursing staff.

7. Sarah's parents observe you placing soiled linens in the receptacle in the room and ask if the dirty laundry will have to remain in the room until Sarah is well.

USE INFECTION CONTROL TECHNIQUES

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

Skill development for: READING SKILLS
SCIENCE SKILLS

- Introduce the assignment to the students by discussing why reading and science skills are important.
- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  — Gaining factual information

  — Interpreting graphics and symbols

  SCIENCE SKILLS

  — Investigating health issues

- If students have difficulty gaining factual information, have them read the information several times, noting the key words and ideas.
- If students have difficulty interpreting graphics and symbols, review the structure of the chart.
- If students have difficulty investigating health issues, discuss the procedures for caring for an isolated patient.

3. Sarah's parents tell you that a friend's child was hospitalized for measles. They want to know why the isolation procedure will not be the same, since both diseases involve skin lesions.

4. Explain the steps Sarah's parents will take:
To enter the room:

To leave the room:

444

USE INFECTION CONTROL TECHNIQUES

ASSIGNMENT SHEET 1

1. Strict isolation

2. Gown, gloves and mask

3. Chickenpox is transmitted by direct contact and by air. Measles is transmitted only by the respiratory system through the air. Isolation measures must be different because of different modes of transmission.

4. To enter the room:

   Wash hands.
   Put on gown, making sure to cover all clothing and tie strings at neck and waist.
   Apply gloves, making sure to cover the cuff of the gown.
   Put on mask, tying securely.

   To leave the room:

   Remove gloves by grasping palm of one hand and pulling inside out. Hold on to the first glove while reaching under the cuff of the second with ungloved fingers and pulling second glove over the first. Dispose of gloves in a covered container.
   Wash hands.
   Remove the mask.
   Remove the gown by untying the waist ties first, then the neck, pulling strings forward and sliding arms out of the sleeves. Fold the contaminated outside surface inward and dispose of the gloves in the trash.
   Wash your hands.

5. Visitors will be fine for Sarah as long as they follow isolation technique for their protection.

6. The nursing staff should still provide for all of Sarah's needs. It is the organism causing varicella that is being isolated and not Sarah. They will still treat her as a significant human being.

7. The linen will be taken out with the assistance of a second nurse on the outside who will help double-bag the contaminated linen for removal from the room.

JOB SHEET 1

USE INFECTION CONTROL TECHNIQUES

IV

OBJECTIVE 16a

Perform effective handwashing.

INTRODUCTION

Handwashing is the single most effective technique in infection control. It should be practiced frequently. Nurses need to wash their hands before patient care, after patient care, and during patient care whenever they come in contact with areas or objects which could be contaminated with pathogens. It seems so simple, but thorough handwashing is extremely important.

EQUIPMENT AND SUPPLIES

- Soap

  NOTE: Liquid soap is preferred since microorganisms from the hands can cling to bar soap, but with care, bar soap can be used effectively.

- Running water

  NOTE: A sink with knee controls is ideal, but these are frequently not available. Adaptations can be made for hand controls.

- Paper towels
- Safety pin (Optional)
- Lotion (Optional)

PROCEDURE

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols
- Gain factual information

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures

Assessment and Analysis

1. Consider the activities just completed to determine the length of time required for handwashing.

2. Consider medical or nursing diagnoses that would require alteration in the handwashing procedure.

Planning

3. Remove watch or push up on arm.

   NOTE: If removed, place in pocket or secure to uniform with safety pin.

4. Remove rings and place in pocket or secure to uniform with safety pin.

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- Practice good work habits/attitudes

5. Turn on water and adjust to comfortably warm temperature.

6. Stand in front of sink without touching uniform to sink.

Implementation

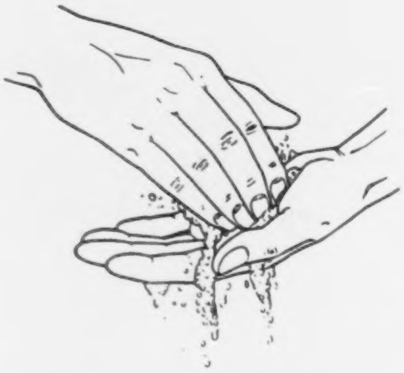
7. Wet hands completely without splashing water on uniform.

8. Apply about one teaspoon of liquid soap or work up a good lather with bar soap.

9. If bar soap is used, rinse bar before dropping back into soap dish.

10. Continue to wash hands, using **friction**, for 30 seconds to two minutes depending upon the soil.

11. Clean nails of each hand by pressing fingertips on open palms of opposite hand or use fingernails of opposite hand to remove soil.



Handwashing*

12. Interlace fingers to assure cleaning of all surfaces.

13. Wash at least two inches above wrist or higher, depending on soil.

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*Source: Hogan/Sorrentino: *Textbook for Long-Term Care Assistants*, St. Louis, ©1988, The C.V. Mosby Company. Used with permission.

14. Rinse hands thoroughly, keeping fingers down.

15. Dry hands well with paper towel, wiping from fingers toward wrist and forearm.

16. Turn off water using dry paper towel to turn hand-control faucet.

17. Apply lotion if appropriate or desired.

Evaluation

18. Evaluate using the following criteria.

    a. Hands are free of any visible soil including areas under and around nails.

    b. Hands are thoroughly dry.

    c. Hands are free of any cracks or lesions.

    d. Hands are moisturized with lotion when appropriate.

    e. Area around sink is dry and clean.

Documentation

19. Handwashing is absolutely essential for the nurse to complete before, during, and after patient care but is not documented.

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USE INFECTION CONTROL TECHNIQUES

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  - Following written instructions
  - Gaining factual information
  - Interpreting graphics and symbols

  EMPLOYABILITY SKILLS

  - Mastering a specific job task/procedure
  - Applying safety practices/procedures
  - Practicing good work habits/attitudes

- If students have difficulty following written instructions:

  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.

- If students have difficulty mastering a specific job task/procedure

  - Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.

- Suggest they study each component of the procedure to determine which area is causing difficulty.
  - Review the entire procedure.
  - Team them a with proficient student or professional to practice the procedure.
- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.
- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.
  - Make sure the student knows what is expected of him or her.

JOB SHEET 2

USE INFECTION CONTROL TECHNIQUES IV

OBJECTIVE 16b

Perform concurrent cleaning of the patient's room.

INTRODUCTION

Throughout the patient's hospitalization, the nurse has a responsibility to keep the surroundings as free as possible from pathogenic organisms. The housekeeping department typically cleans the floors, empties trash once a day, and cleans the bathroom. The area immediately surrounding the patient is the nurse's responsibility.

Some steps should be taken to keep the unit clean. These add to the pleasant appearance of the unit and limit the number of microorganisms by eliminating dust and organic material on items in the unit. Generally, these measures are carried out after the bath and other personal hygiene measures have been completed and as needed during the course of the day.

EQUIPMENT AND SUPPLIES

- Paper towels
- Plastic trash can liners
- Clean gloves

PROCEDURE

Functional Reading Skills
- Follow written instructions

Interactive Communication Skills
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Assessment and Analysis

1. Check on equipment and supplies that need to remain in patient's room.
2. Note all medical or nursing diagnoses that call for special precautions or techniques.

Planning

3. Obtain cleaning cloth or damp paper towel.

   NOTE: Do not use a washcloth that has been contaminated by use on the patient's body. Use paper towels that can be disposed of after use.

4. Apply gloves as necessary or indicated by type of soil.
5. Explain measures to patient.

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Job Acquisition/
Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with clients/customers

Implementation

6. Remove all unnecessary equipment.

7. Store patient's personal care items in bedside table or other appropriate site. Make sure all are free of any body secretions and are dry.

8. Gather up all items such as newspapers, greeting cards, and other paper items. Secure patient's permission to store in an appropriate place or to discard.

9. Remove any food items left from meal time.

10. Remove all soiled linen from the room.

    NOTE: Gloves are desirable for this step.

11. Use cleaning cloth or paper towels to damp-dust top surfaces of overbed table, bedside table, and siderails of bed, working from the cleanest area to the dirtiest area.

12. Wearing gloves, remove plastic liner from trash receptacle, tie closed, and replace with clean liner.

13. Dispose of trash bag in proper area.

14. Remove gloves without contaminating self.

15. Wash hands.

16. Make patient comfortable and see that call light is in place.

Evaluation

17. Evaluate using the following criteria

    a. Unit looks neat and clean.

    b. No unpleasant odors are detected.

Documentation

No documentation is necessary.

USE INFECTION CONTROL TECHNIQUES

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for:
READING SKILLS
ORAL COMMUNICATIONS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  - Following written instructions

  ORAL COMMUNICATION SKILLS

  - Communicating with clients/customers/patients

  INTERPERSONAL/RELATING SKILLS

  - Interacting with clients/customers/patients

  EMPLOYABILITY SKILLS

  - Mastering a specific job task/procedure
  - Applying safety practices/procedures
  - Practicing good work habits/attitudes
  - Dealing effectively with client/customer/patient

- If students have difficulty communicating with, interacting with, or dealing effectively with patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 3

USE INFECTION CONTROL TECHNIQUES

IV

OBJECTIVE 16c

Use the correct technique to don and remove isolation gear.

INTRODUCTION

Isolation technique is important to protect both nurse and patient. Any break in technique compromises the safety of both. Careful attention to technique is essential. Protective gear is protective only when it is applied and removed correctly.

EQUIPMENT AND SUPPLIES

- Disposable gown
- Mask
- Gloves
- Goggles
- Waste receptacle

PROCEDURE

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes

Assessment and Analysis

1. Check medical or nursing diagnoses to determine the exact type of materials needed and specific needs of patient.

2. Check agency policy manual to determine specific procedures.

Planning

3. Assemble all equipment.

   NOTE: Be sure all necessary items are available before entering isolation room to save time and to avoid possible contamination.

Implementation

Donning isolation gear:

4. Wash hands.

5. Grasp gown at top edge and allow to fall open with outside away from you.

6. Slide arms through sleeves until cuffs cover wrists.

7. Securely tie at neck and waist.

   NOTE: Be sure clothing is completely covered to avoid contamination.

8. Apply clean gloves making sure cuffs extend over cuffs of gown.

9. Apply mask to fit securely over face and mouth.

10. Use goggles if indicated. (Recommended when splashes are possible such as with tracheostomy care.)

Removing isolation gear:

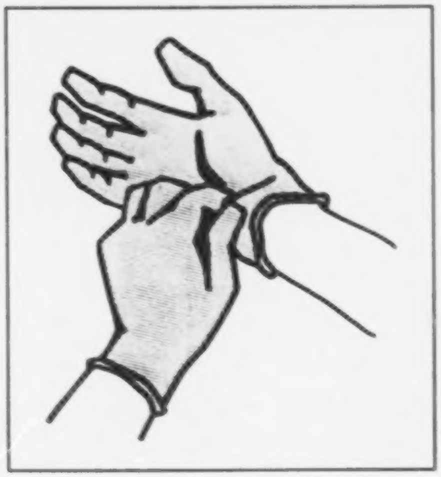
11. Grasp palm of one glove with fingers of opposite hand.

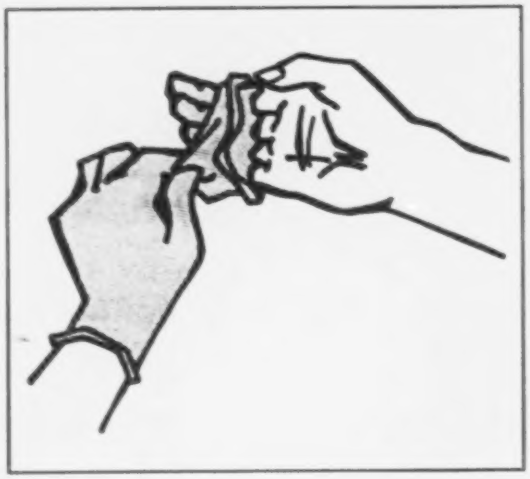
12. Pull cuff down until glove is inside out, but still held in remaining gloved hand.

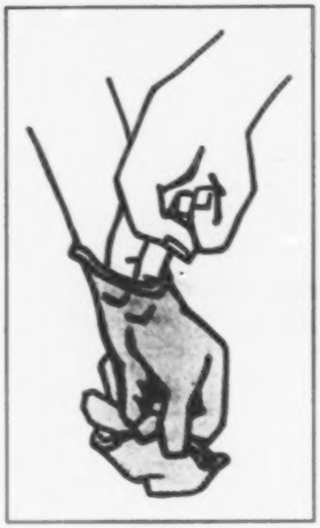
13. Hold glove while reaching with ungloved fingers inside cuff of glove remaining on hand.

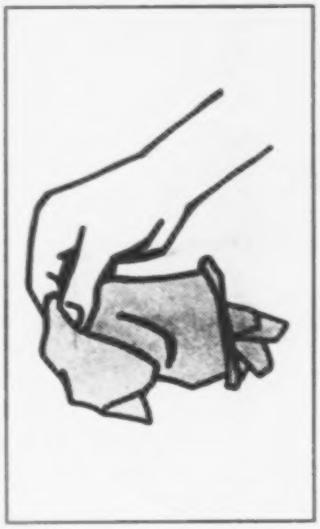
14. Pull second glove down over first.

15. Dispose of both in plastic-lined receptacle.









16. Wash hands.

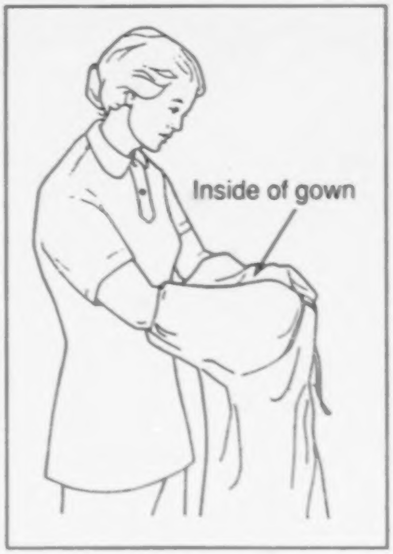
17. Untie and remove mask, placing in plastic lined receptacle.

18. Untie gown at neck and pull ties forward to partially pull gown off shoulders.

19. Untie gown at waist and let ties hang down.

20. Slide the gown off by working hands through inside of sleeves.

21. Hold gown by inside shoulder seams and roll gown with inside out to avoid touching any contaminated areas. Hold gown away from body.



Removing Gown*

22. Dispose of gown in plastic lined receptacle.

23. Wash hands.

Evaluation

24. Evaluate using the following criteria:

    a. Gowns, mask, and gloves are removed without contaminating self.

    b. Contaminated gear is disposed of in plastic-lined receptacle.

Documentation

The fact that the patient is in isolation needs to be documented.

---

*From *Fundamentals of Nursing*, Third Edition, by Kozier and Erb (Menlo Park, CA: Addison-Wesley Publishing Company, 1987). Reprinted by permission.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 4

USE INFECTION CONTROL TECHNIQUES

IV

OBJECTIVE 16d

Use the correct technique to enter isolation room, double-bag contaminated items, and leave room.

INTRODUCTION

Anything that must be brought out of the isolation unit must be double-bagged to prevent contamination. This would include linens, trash, and specimens. The technique calls for two nurses. One works with the contaminated materials inside the unit while wearing appropriate isolation garb. The other stands outside the unit and holds the clean outer bag. Both must know their roles to prevent contamination.

EQUIPMENT AND SUPPLIES

- Appropriate bags (usually plastic) inside the room
- Appropriate bags (often red plastic) outside the room
- Fasteners, tapes, or ties
- Tape or labels
- Marking pen

PROCEDURE

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes

Assessment and Analysis

1. Check medical and nursing diagnoses to determine the exact type of materials needed and specific needs of patient.

2. Check agency policy manual to determine specific procedures.

Planning

3. Assemble all equipment.

Implementation

4. Enter room donning appropriate gear.

5. Place material to be carried outside of room in appropriate bag.

6. Secure bag by tying or with fastener.

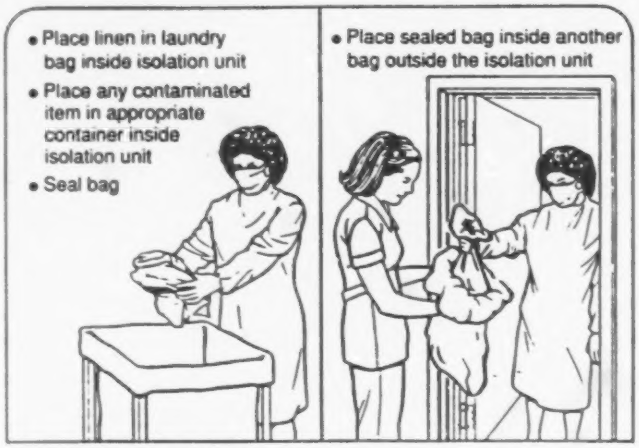
7. Open door of unit and place bag into second bag held by nurse outside door, being careful not to contaminate second nurse.

8. Remove isolation gear following appropriate procedure.

BEST COPY AVAILABLE

Outside isolation unit:

9. Hold appropriate bag open by spreading top and creating cuff to protect hands.


• Place linen in laundry bag inside isolation unit
• Place any contaminated item in appropriate container inside isolation unit
• Seal bag
• Place sealed bag inside another bag outside the isolation unit

Double bagging*

10. After nurse inside unit has deposited contaminated bag inside clean bag, carefully close outside bag to prevent contaminating hands.

    NOTE: Inside of second bag is contaminated, but outside of bag is considered clean.

11. Seal with fastener or tape.

12. Label with appropriate tag or marking pen and tape.

13. Take bag to appropriate area for disposal, cleaning, or analysis, according to agency policy.

14. Wash hands.

Evaluation

15. Evaluate using following criteria:

    a. Contaminated item or materials were removed from isolation unit without any contamination of materials outside unit.

*Source: Connie A. Will/Judith B. Eighmy, *Being A Long-Term Care Nursing Assistant*, 2e, ©1988, p. 33. Reprinted by permission of Prentice-Hall, Englewood Cliffs, New Jersey.

b. Bag was taken to correct location according to agency policy.

Documentation

No documentation is required.

USE INFECTION CONTROL TECHNIQUES

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Refer to Instructional Supplement for Job Sheet 1.

PRACTICAL TEST 1

USE INFECTION CONTROL TECHNIQUES

IV

JOB SHEET 1

Perform effective handwashing.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Considered the activities just completed to determine the length of time required for handwashing.	_____	_____
2. Considered medical or nursing diagnoses that would require alteration in the handwashing procedure.	_____	_____
3. Removed watch or pushed up on arm.	_____	_____
4. Removed rings and placed in pocket or secured to uniform with safety pin.	_____	_____
5. Turned on water and adjusted to comfortably warm temperature.	_____	_____
6. Stood in front of sink without touching uniform to sink.	_____	_____
7. Wet hands completely without splashing water on uniform.	_____	_____

	YES	NO
8. Applied about one teaspoon of liquid soap or worked up a good lather with bar soap.	_____	_____
9. If bar soap was used, rinsed bar before dropping back into soap dish.	_____	_____
10. Continued to wash hands using friction for 30 seconds to two minutes, depending upon the soil.	_____	_____
11. Cleaned nails of each hand by pressing fingertips on open palms of opposite hand or used fingernails of opposite hand to remove soil.	_____	_____
12. Interlaced fingers to assure cleaning of all surfaces.	_____	_____
13. Washed at least two inches above wrist or higher, depending on soil.	_____	_____
14. Rinsed hands thoroughly, keeping fingers down.	_____	_____
15. Dried hands well with paper towel, wiping from fingers toward wrist and forearm.	_____	_____
16. Turned off water using dry paper towel to turn hand control faucet.	_____	_____
17. Applied lotion if appropriate or desired.	_____	_____
18. Evaluated according to established criteria.	_____	_____
19. Documented appropriately.	_____	_____

EVALUATORS COMMENTS

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Hands free of any visible soil including areas under and around nails	4	3	2	1
Hands thoroughly dry	4	3	2	1
Hands moisturized with lotion when appropriate	4	3	2	1
Area around sink clean and dry	4	3	2	1

EVALUATOR'S COMMENTS

____

____

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 2

USE INFECTION CONTROL TECHNIQUES

IV

JOB SHEET 2

Perform concurrent cleaning of the patient's room.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked on equipment and supplies that need to remain in patient's room.	____	____
2. Noted all medical or nursing diagnoses that called for special precautions or techniques.	____	____
3. Obtained cleaning cloth or damp paper towel.	____	____
4. Applied gloves as necessary or indicated by type of soil.	____	____
5. Explained measures to patient.	____	____
6. Removed all unnecessary equipment.	____	____
7. Stored patient's personal care items in bedside table or other appropriate site. Made sure all were free of any body secretions and are dry.	____	____

	YES	NO
8. Gathered up all items such as newspapers, greeting cards, and other paper items. Secured patient's permission to store in an appropriate place or to discard.	____	____
9. Removed any food items left from meal time.	____	____
10. Removed all soiled linen from the room.	____	____
11. Used cleaning cloth or paper towels to damp-dust top surfaces of overbed table, bedside table, and siderails of bed, working from the cleanest area to the dirtiest.	____	____
12. Wearing gloves, removed plastic liner from trash receptacle, tied closed, and replaced with clean liner.	____	____
13. Disposed of trash bag in proper area.	____	____
14. Removed gloves without contaminating self.	____	____
15. Washed hands.	____	____
16. Made patient comfortable and saw that call light was in place.	____	____
17. Evaluated according to established criteria.	____	____
18. Documented appropriately.	____	____

EVALUATORS COMMENTS

____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Unit looked neat and clean	4	3	2	1
No unpleasant odors were detected	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 3

USE INFECTION CONTROL TECHNIQUES

IV

JOB SHEET 3

Use the correct technique to don and remove isolation gear.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Write a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked medical or nursing diagnoses to determine the exact type of materials needed and specific needs of patient.	_____	_____
2. Checked agency policy manual to determine specific procedures.	_____	_____
3. Assembled all equipment.	_____	_____
Donning isolation gear:		
4. Washed hands.	_____	_____
5. Grasped gown at top edge and allowed to fall open with outside away from you.	_____	_____
6. Slid arms through sleeves until cuffs covered wrists.	_____	_____
7. Securely tied at neck and waist.	_____	_____
8. Applied clean gloves making sure cuffs extended over cuffs of gown.	_____	_____

	YES	NO
9. Applied mask to fit securely over face and mouth.	____	____
10. Used goggles if indicated.	____	____

Removing isolation gear:

	YES	NO
11. Grasped palm of one glove with fingers of opposite hand.	____	____
12. Pulled cuff down until glove was inside out, but still held in remaining gloved hand.	____	____
13. Held glove while reaching with ungloved fingers inside cuff of glove remaining on hand.	____	____
14. Pulled second glove down over first.	____	____
15. Disposed of both in plastic-lined receptacle.	____	____
16. Washed hands.	____	____
17. Untied and removed mask, placing in plastic-lined receptacle.	____	____
18. Untied gown at neck and pulled ties forward to partially pull gown off shoulders.	____	____
19. Untied gown at waist and let ties hang down.	____	____
20. Slid the gown off by working hands through inside of sleeves.	____	____
21. Held gown by inside shoulder seams and rolled gown with inside out to avoid touching any contaminated areas. Held gown away from body.	____	____

	YES	NO
22. Disposed of gown in plastic-lined receptacle.	____	____
23. Washed hands.	____	____
24. Evaluated according to established criteria.	____	____
25. Documented appropriately.	____	____

EVALUATORS COMMENTS

____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Gowns, mask and gloves were removed without contaminating self	4	3	2	1
Contaminated gear was disposed of in plastic-lined receptacle	4	3	2	1

EVALUATORS COMMENTS

____

____

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

__________ (Date)

____________________ (Evaluator's Signature)

____________________ (Evaluator's Position)

PRACTICAL TEST 4

USE INFECTION CONTROL TECHNIQUES

JOB SHEET 4

Use the correct technique to enter isolation room, double bag contaminated items, and leave room.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Write a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked medical and nursing diagnoses to determine the exact type of materials needed and specific needs of patient.	_____	_____
2. Checked agency policy manual to determine specific procedures.	_____	_____
3. Assembled all equipment.	_____	_____
4. Entered room donning appropriate gear.	_____	_____
5. Placed material to be carried outside of room in appropriate bag.	_____	_____
6. Secured bag by tying or with fastener.	_____	_____
7. Opened door of unit and placed bag into second bag held by nurse outside door, being careful not to contaminate second nurse.	_____	_____
8. Remove isolation gear following appropriate procedure.	_____	_____

	YES	NO
Outside isolation unit:		
9. Held appropriate bag open by spreading top and creating cuff to protect hands.		
10. After nurse inside unit deposited contaminated bag inside clean bag, carefully closed outside bag to prevent contaminating hands.		
11. Sealed with fastener or tape.		
12. Labeled with appropriate tag or marking pen and tape.		
13. Took bag to appropriate area for disposal, cleaning, or analysis according to agency policy.		
14. Washed hands.		
15. Evaluated according to established criteria.		
16. Documented appropriately.		

EVALUATORS COMMENTS

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Contaminated items or materials were removed from unit without any contamination of materials outside unit	4	3	2	1
Bag was taken to correct location according to agency policy	4	3	2	1

EVALUATORS COMMENTS

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

WRITTEN TEST

USE INFECTION CONTROL TECHNIQUES

IV

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with infection control practices to the correct definitions. Write the correct letter in the blank.

PART I

_____ 1. Device that uses steam under pressure to achieve sterility

_____ 2. Living being which can be seen only through a microscope; some may be disease producing

_____ 3. Requiring oxygen for existence

_____ 4. Agency of U.S. government concerned with disease identification, prevention and control

_____ 5. Free of all organisms and spores

_____ 6. Point at which an organism may leave the body

_____ 7. Substance which prevents the growth of microorganisms and is safe to use on human skin

_____ 8. Relatively free of pathogenic organisms

a. Aerobic

b. Antiseptic

c. Autoclave

d. Center for Disease Control

e. Clean

f. Microorganism

g. Portal of exit

h. Sterile

i. Universal precautions

PART II

______1. Steps taken to prevent transmission of infection to an individual with poor resistance

______2. Capable of being passed from one person to another

______3. Protective measures carried out with all patients to prevent transmission of organisms through blood and body fluids disease producing

______4. Disease-producing

______5. Response of the body to foreign substance characterized by redness, heat, pain and swelling

______6. Steps taken to maintain sterility

______7. Referring to the organism causing tuberculosis

______8. Substance which prevents the growth of microorganisms and kills many, but is irritating to human skin

a. AFB

b. Contagious

c. Disinfectant

d. Inflammation

e. Pathogenic

f. Protective isolation

g. Surgical asepsis

h. Sterile

i. Universal precautions

PART III

______1. Capable of existing without oxygen

______2. Capable of being passed from one person to another

______3. Cell of the body capable of surrounding and engulfing foreign material

a. Anaerobic

b. Bacteriocidal

c. Communicable

d. Infection

e. Medical asepsis

______4. Cleaning process undertaken when patient leaves hospital

______5. Disease state caused by pathogenic organisms

______6. Point at which an organism may enter the body

______7. Killing pathogens

______8. Practices which prevent the spread of pathogens

f. Phagocyte

g. Portal of entry

h. Terminal disinfection

i. Universal precautions

PART IV

______1. A dormant state that some pathogens can assume when growth conditions are not favorable

______2. Cleaning done during the period of hospitalization

______3. An infection acquired during hospitalization

______4. To introduce pathogenic material

______5. Free from disease-producing organisms

______6. Pertaining to the intestines

______7. Set apart from others in some manner

______8. Preventing the growth of pathogens

a. Asepsis

b. Bacteriostatic

c. Concurrent disinfection

d. Contaminate

e. Enteric

f. Isolation

g. Nosocomial infection

h. Spore

OBJECTIVE 2

Select the word or phrase that completes statements about microorganism growth. Write the correct letter in the blank.

______1. Boiling can be used as a means of sterilization because organisms ___.

a. are anaerobic
b. thrive at temperatures similar to body temperature
c. are killed by too much moisture
d. grow best in colder temperatures

______2. On which of the following items would there most likely be an increase of microorganisms?

a. Sheets dried outdoors in sunlight
b. Baked chicken
c. Patient care utensils washed with an acidic solution
d. Coconut cream pie stored at room temperature

______3. Which of the following facts makes the human body a favorable medium for the growth of microorganisms?

a. About 60% of the human body is water.
b. White blood cells act as phagocytes.
c. Blood pH is normally about 7.4.
d. Urine specific gravity is about 1.015.

______4. Which condition in the patient's room would favor the growth of microorganisms?

a. The urinal is stored in the beside table.
b. The patient saves his milk to drink later.
c. Oxygen is being supplied to the patient.
d. Visitors come frequently.

______5. The chemical environment of the human body favors the growth of microorganisms because ___.

a. most organisms are anaerobes
b. most body fluids have a near neutral pH
c. many people are overweight
d. many people practice poor personal hygiene measures

______6. The area in the patient's room where pathogens would be most likely to grow is ___.

a. on the stack of clean linen
b. on the light fixture
c. in the water splashed around the skin
d. in the air

______7. Freezing is used to preserve food because ___.

a. the cold temperatures kill microorganisms
b. the dark interior of freezers kills microorganisms
c. freezing changes the pH of substances
d. freezing prevents the growth of microorganisms

______8. Which statement is true concerning the growth needs of pathogens?

a. All pathogens need oxygen.
b. Most pathogens will grow rapidly at a temperature of 212 degrees F.
c. Most pathogens grow well in a dark environment.
d. Most pathogens grow well on a dry surface.

OBJECTIVE 3

Select the word or phrase that completes statements about natural body defenses and their maintenance. Write the correct letter in the blank.

______1. Which of the functions of the body is actually a defense against infection?

a. Vomiting
b. Sneezing
c. Blinking
d. All of these

______2. In order to assist the patient in maintaining body defenses, the nurse must know that ___.

a. skin and mucous membrane need to be intact
b. lotions on the skin interfere with the skin's protective function
c. fair skin is more sensitive to sun
d. frequent bathing prevents body odor

______3. The flow of urine through the urinary system ___.

a. encourages the growth of pathogens
b. discourages phagocytosis
c. irritates the mucous lining
d. washes away invading particles

______4. The fact that body cells are constantly being replaced by new ones ___.

a. makes infection control difficult
b. indicates a need for cleansing with antiseptics
c. aids in defending the body
d. speeds up the aging process

______5. The nursing action which would most endanger a body defense is ___.

a. giving a back rub
b. giving an injection
c. taking the temperature
d. giving an enema

______6. A patient who is sneezing or tearing ___.

a. has an infection
b. needs immediate attention
c. has defense mechanisms which have failed
d. is displaying defenses against a foreign substance

______7. The body secretion which protects us with a highly acid pH is found ___.

a. on the skin
b. in the mouth
c. in the stomach
d. in the urinary system

______8. The defense mechanism known as phagocytosis is carried out ___.

a. in the blood
b. in the brain
c. when antibiotics are given
d. when sterile technique is used

OBJECTIVE 4

Select factors that may alter natural body defenses. Write an "X" in blanks before factors.

______1. A middle-aged man worried about his business

______2. A 20-year-old college athlete with a cold

______3. A fifteen-year-old who eats constantly

______4. A child receiving chemotherapy for leukemia

______5. An 82-year-old nursing home resident

______6. A 40-year-old man with high blood pressure

______7. A woman being treated with antibiotics

______8. A woman who takes medication for ulcers

______9. A newborn going home from the hospital

_____10. A 45-year-old man who exercises frequently

_____11. A 60-year-old woman having a hysterectomy

_____12. An 80-year-old woman who will only drink liquids

OBJECTIVE 5

Explain the links in the chain of infection.

Presence of Microorganism ______________________________

____

____

____

Reservoir____________________________________

____

____

____

Portal of Exit ______________________________

____

____

____

Mode of Transmission ______________________________

____

____

____

Portal of Entry ______________________________

____

____

____

Susceptible Host ______________________________

____

____

____

OBJECTIVE 6

Select the word or phrase that completes statements about the mechanism and purposes of the inflammatory response. Write the correct letter in the blank.

______1. The inflammatory response is ___.

a. a local reaction
b. extremely dangerous to the body
c. accompanied by high fever
d. evidence that body defenses have failed

_______2. Symptoms of the inflammatory response include ___.

a. anemia
b. increased urine output
c. pain
d. headache

_______3. One purpose of the inflammatory response is to ___.

a. destroy the pathogen
b. produce pus
c. decrease the flow of blood to the area
d. produce infection

_______4. The symptom which is part of the inflammatory response is ___.

a. vomiting
b. coughing
c. frequent urination
d. swelling

_______5. The TRUE statement concerning the blood supply to an inflamed area is ___.

a. Bleeding is likely.
b. There is an increase in blood to the area.
c. Interruption in the flow of blood causes a pale appearance.
d. There is no change in the flow of blood to the area.

_______6. The inflammatory response means the body is ___.

a. being overtaken by infection
b. attempting to prevent the spread of the pathogen
c. a reservoir of infection
d. in poor health

OBJECTIVE 7

Select the word or phrase that completes statements about nosocomial infections. Write the correct letter in the blank.

______1. Which of the following patients has a nosocomial infection?

a. The patient who developed pneumonia after surgery
b. The patient who was admitted with meningitis
c. The infant with a hernia
d. A woman who has surgery on the urinary system

______2. Which nursing action will carry the greatest risk of producing a nosocomial infection?

a. Assisting a post-operative patient to walk
b. Emptying a urinal
c. Giving oral medication
d. Starting an IV

______3. Nosocomial infections result from ___.

a. medical malpractice
b. patients who will not cooperate
c. activities of the patient prior to hospitalization
d. treatment given during hospitalization

______4. The nursing action which would have the greatest possibility of leading to a nosocomial infection would be ___.

a. inserting a urinary catheter
b. giving oral medication
c. bathing the patient
d. insisting that the patient turn in bed

OBJECTIVE 8

Distinguish between medical and surgical asepsis. Write an "M" in the blank before each example of medical asepsis and an "S" in the blank before each example of surgical asepsis.

______1. Assisting in surgery

______2. Damp-dusting a patient's unit

______3. Giving an injection

______4. Washing hands between patients

______5. Inserting a urinary catheter

______6. Using an autoclave for contaminated instruments

______7. Having the housekeeping department clean the patient's unit after discharge

______8. Changing the linen on the patient's bed

______9. Using a disinfectant in the tub before bathing the patient

OBJECTIVE 9

Select appropriate personal hygiene measures for the nurse to ensure medical asepsis. Write an "X" in front of the measures.

______1. Wear clean uniforms daily.

______2. Wear uniforms only to work.

______3. Keep hair clean and secured.

______4. Bathe frequently.

______5. Keep fingernails short and clean.

______6. Refrain from wearing nail polish.

______7. Avoid wearing jewelry in the clinical area.

______8. Wash hands frequently.

______9. Wash hands before beginning patient care and before leaving the clinical area.

_____10. Wash hands after handling clean supplies.

OBJECTIVE 10

Select appropriate personal hygiene measures for the patient to ensure medical asepsis. Write an "X" in front of the measures.

______1. Offer opportunities for patients to practice handwashing.

______2. Keep personal items clean and stored.

______3. Provide tissue to avoid the spread of vectors.

______4. Clean any soiled areas on the body promptly.

______5. Encourage the use of footwear.

OBJECTIVE 11

Select the word or phrase that completes statements about measures to maintain concurrent disinfection. Write the correct letter in the blank.

______1. Concurrent disinfection is done ___.

a. before the patient arrives on the nursing unit
b. during the patient's hospital stay
c. after the patient is discharged
d. by the infection control nurse

______2. Which situation would need to be corrected?

a. The nurse carries linens away from the body.
b. The linen cart is uncovered in the hallway.
c. A sheet which falls to the floor is placed in the laundry.
d. Clean linen is placed on the clean overbed table.

______3. Equipment such as bedpans and bath basins will be less likely to aid in the transmission of infection if ___.

a. it is used for one patient only
b. it is cleaned with bleach
c. nurses wear sterile gloves when handling it
d. metal items are used

______4. If a cleaning compound contains phenol, it would be too harsh for use on skin and would be classed as a/an ___.

a. antiseptic
b. disinfectant
c. sterile solution
d. antibiotic

______5. The solution recommended for cleaning blood spills is ___.

a. a phenol compound
b. alcohol
c. bleach
d. soap and water

______6. Which statement describes appropriate technique in handling soiled equipment?

a. Glass thermometers are sterilized periodically.
b. Bathtubs, showers and sitz baths are cleaned with antiseptic solutions.
c. Equipment soiled with organic material should be rinsed with hot water before sterilization.
d. Stethoscopes should be wiped frequently with alcohol swabs.

______7. The nurse will be less likely to become contaminated with infectious materials if ___.

a. gloves are worn for disposal of body wastes
b. dressing materials are allowed to air dry after removal
c. concurrent disinfection is left to housekeeping personnel
d. patients with fevers are isolated

OBJECTIVE 12

Select the word or phrase that completes statements about barrier techniques used for infection control. Write the correct letter in the blank.

______1. Even when the patient does not have an infection, gowns and masks should be worn if ___.

a. the patient is coughing
b. contact with saliva is expected
c. splashes of blood are likely to occur
d. mouth to mouth resuscitation is given

______2. One possible route of transmission of the AIDS virus is avoided if ___.

a. needles are disposed of without recapping
b. masks are worn with suspected patients
c. patients with hepatitis B are isolated
d. urinary catheters are not used

______3. When gloves are worn to handle body secretions, it will be necessary to ___.

a. use the same gloves several times to cut down on costs
b. remove the gloves to keep them right side out
c. do so without the patient knowing
d. wash the hands after removing the gloves

______4. When the nurse wears gloves to empty urine from a urinal and to remove an IV needle from a vein, the practice is known as ___.

a. strict isolation
b. protective isolation
c. universal precautions

OBJECTIVE 13

Match isolation categories with methods of transmission, examples of diseases and protective measures. Write the letter of the isolation category which corresponds to the method of transmission listed.

PART I

______1. Direct or indirect contact

______2. Contact with blood or body fluids

______3. Contact with droplets

______4. Direct contact and short distance through air

______5. Long distance through air contact

______6. Contact with feces

______7. Contact with blood, secretions, mucous membranes, broken skin, moist body substances

______8. Short distance through air

a. AFB

b. Blood/body fluid

c. Body substance

d. Contact

e. Drainage/secretion precaution

f. Enteric

g. Respiratory

h. Reverse, protective or neutropenic

i. Strict

PART II

Write the letter of the isolation category which corresponds to examples of diseases listed.

______1. Chickenpox, smallpox or diphtheria

______2. Tuberculosis

______3. AIDS or Hepatitis B

______4. Mumps, measles or meningitis

______5. Infected burns, wound or skin infections

______6. Rubella, impetigo, scabies, respiratory infections of young children

______7. Hepatitis A or gastroenteritis

______8. Wide range of conditions

a. AFB

b. Blood/body fluid

c. Body substance

d. Contact

e. Drainage/secretion precaution

f. Enteric

g. Respiratory

h. Reverse, protective or neutropenic

i. Strict

PART III

Write the letter of the isolation category which corresponds to protective measures listed.

______1. Private room with door closed; mask, gown and gloves

______2. Gloves; gown if soiling is likely

______3. Private room; mask

______4. Gloves; gown if contact is likely

______5. Gloves; gown if contact with drainage likely

a. AFB

b. Blood/body fluid

c. Body substance

d. Contact

e. Drainage/secretion precaution

______6. Private room; mask, gown if soiling from pulmonary secretions likely

______7. Private room; gown, gloves, masks for close contact

______8. Gloves, gown, apron, mask and/or goggles as required

f. Enteric

g. Respiratory

h. Reverse, protective or neutropenic

i. Strict

OBJECTIVE 14

Select from a list nursing responsibilities to meet the emotional needs of the isolated patient. Write an "X" in the blank before each statement that addresses the emotional needs of the isolated patient.

______1. Explain the techniques used and the reasons for them.

______2. Answer patients' questions.

______3. Eliminate unnecessary dialogue with the patient.

______4. Spend time with the patient.

______5. Deliver physical care and quickly leave.

______6. Encourage visitors.

______7. Provide other diversionary activities.

NOTICE

The following assignment sheets and job sheets are not part of the Written Test. If they have not been completed, check with your instructor.

OBJECTIVE 15

Develop a teaching plan for the isolated patient. SCORE______

OBJECTIVE 16

Demonstrate the ability to

a. Perform effective handwashing. RATING______

b. Perform concurrent cleaning of the patient's room. RATING______

c. **Use the correct technique to don and remove isolation gear.** RATING______

d. **Use the correct technique to enter isolation room, double-bag contaminated items, and leave room.** RATING______

WRITTEN TEST ANSWERS

USE INFECTION CONTROL TECHNIQUES IV

OBJECTIVE 1

PART I

1. c
2. f
3. a
4. d
5. h
6. g
7. b
8. e

PART II

1. f
2. b
3. i
4. e
5. d
6. g
7. a
8. c

PART III

1. a
2. c
3. f
4. h
5. d
6. g
7. b
8. e

PART IV

1. h
2. c
3. g
4. d
5. a
6. e
7. f
8. b

OBJECTIVE 2

1. b
2. d
3. c
4. b
5. b
6. c
7. d
8. c

OBJECTIVE 3

1. d
2. a
3. d
4. c
5. b
6. d
7. c
8. a

OBJECTIVE 4

1, 2, 4, 5, 7, 9, 11, 12

OBJECTIVE 5

Answers will vary by student but should include the key points for each of the six links in the infection chain. Mode of transmission should include information on each of the 4 transmission modes and itemize the 3 forms of contact.

OBJECTIVE 6

1. a
2. c
3. a
4. d
5. b
6. b

OBJECTIVE 7

1. a
2. d
3. d
4. a

OBJECTIVE 8

1. S
2. M
3. S
4. M
5. S
6. S
7. M
8. M
9. M

OBJECTIVE 9

1, 2, 3, 4, 5, 7, 8, 9

OBJECTIVE 10

1, 2, 4, 5

OBJECTIVE 11

1. b
2. b
3. a
4. b
5. c
6. d
7. a

OBJECTIVE 12

1. c
2. a
3. d
4. c

OBJECTIVE 13

PART I

1. e
2. b
3. a
4. d
5. i
6. f
7. c
8. g

PART II

1. i
2. a
3. b
4. g
5. e
6. d
7. f
8. c

PART III

1. i
2. f
3. g
4. b
5. e
6. a
7. d
8. c

OBJECTIVE 14 1, 2, 4, 6, 7

OBJECTIVE 15 Refer to answers for Assignment Sheet 1.

OBJECTIVE 16 Refer to practical tests for Job Sheets 1-4.

OBJECTIVE SHEET

PREPARE A PATIENT'S ENVIRONMENT

V

INTRODUCTION

Think about the last time you were a patient or stood by a close friend who was treated in a hospital, emergency room or some other health care setting. How did you feel about the situation? Were you comfortable? Did you understand what was going on and why? Was the environment comfortable and supportive? Safe and conducive to recovery? It would be great if we could answer "yes" to most of these questions.

Much of the responsibility for creating positive feelings about health care lies with the nurse. The nurse must keep in mind ways to control the environment for the comfort and well-being of those served.

No matter what the setting or how long the patient will be a part of it, the nurse has a great responsibility in making the experience as safe and comfortable as possible. In this unit we will examine some parts of the environment to see how these criteria may be met.

UNIT OBJECTIVE

After completing this unit, the student should be able to prepare and care for the patient's environment to help ensure patient comfort and appropriate care. The student will show these competencies by completing job sheets and the written test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with the patient's environment to their correct definitions.
2. Identify basic equipment found in the patient unit.
3. Label basic bed positions.
4. Choose the best word or phrase to complete statements about ways to control the environment for the patient's comfort and health.
5. Describe the two types of sleep.
6. Choose the best word or phrase to complete statements about factors that affect sleep patterns.

7. Select factors that interfere with sleep and the nursing actions that can be used to overcome these factors.
8. Choose the best word or phrase to complete statements about conditions to observe during sleep..
9. Discuss bedmaking.
10. Demonstrate the ability to
    a. Prepare a patient unit. (Job Sheet 1)
    b. Make an unoccupied bed. (Job Sheet 2)
    c. Make an occupied bed. (Job Sheet 3)

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
  - Assist students to conduct a chapter service project on health in the home environment.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules—display in highly visible area.
  - Plan a community or school health project that involves disseminating pamphlets about understanding sleep and why we need it.

DELIVERY

- Discuss objectives.

Objective 1

- Discuss terms concerning the patient's environment.
- Develop a cross-word puzzle or have a "definition bee" over terms to reinforce learning.
- Add any additional terms that might support the information and skills in this unit.

Objective 2

- Discuss basic equipment found in the patient unit.
- Demonstrate equipment students will be working with in lab.

Objective 3

- Discuss bed positions.
- Demonstrate various bed positions in lab.
- Allow students to place beds in various positions.

Objective 4

- Discuss ways to control the environment for comfort and health.
- Have students discuss past experiences with health care institutions. Pinpoint what was good and what was bad about them. Help them see how intelligent, caring nursing measures could eliminate problems when possible.
- Tour several health care facilities to observe environmental features. Include both hospital and nursing home facilities.

Objective 5 and 6

- Discuss reasons rest and sleep are needed and the effects of lack of sleep.
- Show video *Theater of the Night: The Science of Sleep and Dreams.*

Objective 7

- Discuss factors that interfere with sleep and nursing measures to overcome these factors.
- Discuss any bedtime rituals or sleep habits students may have.

Objective 8

- Discuss pertinent observations to make concerning a patient's rest and sleep.
- Show video, *Sleep and Its Disorders*.

Objective 9

- Discuss guidelines for bedmaking.
- Have students practice identifying various items of linen to be used on the bed.

APPLICATION

Objective 10

- Discuss Job Sheet 1.
- Have students complete job sheet.
- Discuss Job Sheet 2.
- Show video, *Bedmaking*.
- Show students how to change pillow without contaminating self or pillow.
- Demonstrate unoccupied bedmaking.
- Have students complete job sheet.
- Discuss Job Sheet 3.
- Demonstrate occupied bedmaking.
- Have students complete job sheet.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.

- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities and job sheets if not previously completed.
- Reteach and retest if necessary.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Basic Clinical Skills: Bedmaking.* VHS, 17 min. Illustrates occupied and unoccupied bedmaking. Order No. MO34, Medcom, Inc., P.O. Box 116, Garden Grove, CA 92642.
- *Sleep and Its Disorders.* VHS, 60 min. Discusses normal sleep, sleep studies and sleep disorders. Modern Talking Picture Service. Film Scheduling Center, 5000 Park Street North, St. Petersburg, FL 33709.
- *Theater of the Night: The Science of Sleep and Dreams.* VHS, 3 parts, 15 min. each. Human Relations Media, 175 Tompkins Avenue, Pleasantville, NY 10570.

UNIT REFERENCES

- Belland, Kathleen Hoerth and Mary Ann Wells. *Clinical Nursing Procedures*. Jones and Bartlett Publisher, Inc., Boston/Monterey, 1987.
- Brill, Esther Levine and Dawn F. Kilts. *Foundations for Nursing*, (2nd ed). Appleton-Century Crofts, Norwalk, Connecticut, 1986.
- Fraser, Cira and Mary Jo Filler, "The Assessment Factor Most Nurses Forget," *RN*, March, 1989. p. 32-34.
- Hegner, Barbara R. and Esther Caldwell. *Assisting in Long-Term Care*. Delmar Publishers, Inc., Albany, New York, 1988.
- Hill-Rom Company "Service Manual," Batesville, Indiana, 1985.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures*. (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Kozier, Barbara and Glenora Erb. *Techniques in Clinical Nursing*. Addison-Wesley Publishing Company, Menlo Park, California, 1982.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C.V. Mosby Company, St. Louis, Missouri, 1987.
- Sorrentino, Sheila A. *Textbook for Nursing Assistants* (2nd ed). The C.V. Mosby Company, St. Louis, Missouri, 1987.
- Sundberg, Mary C. *Fundamentals of Nursing*. Jones and Bartlett Publisher, Inc., Boston/Monterey, 1986.
- Will, Connie A. and Judith B. Eighmy, *Being a Long-Term Care Nursing Assistant*. A Brady Book, Englewood Cliffs, New Jersey, 1988.

INFORMATION SHEET

PREPARE A PATIENT'S ENVIRONMENT *V*

OBJECTIVE 1

Match terms associated with patient's environment to their correct definitions.

- **Asepsis** — Freedom from disease-producing organisms
- **Bath basin** — A receptacle used to hold water for a bedbath
- **Bath blanket** — A cotton-flannel blanket used in various patient care situations
- **Bedpan** — A receptacle for feces or urine
- **Call light** — A means of signaling for assistance
- **Circadian rhythm** — A reoccurring 24 hour cycle
- **Closed bed** — A bed with the top linens pulled up to keep clean all linens that will come into contact with the patient
- **Disorientation** — The state of being unaware of person, place, or time

  EXAMPLE: A disoriented patient may not recognize familiar people or places or know what day it is.

- **Draw sheet** — A piece of linen used across the middle portion of the patient's bed
- **Emergency headboard or footboard** — The type of headboard or foot board found on some hospital beds which easily slides off for use under the patient's chest, should cardiopulmonary resuscitation be necessary
- **Emesis basin** — A kidney-shaped receptacle used in oral hygiene and when a patient is vomiting
- **Enuresis** — Bed-wetting
- **Environment** — Surroundings
- **Fracture bedpan** — A receptacle for feces or urine smaller than a regular bedpan that can be positioned with less movement for the patient

- **Gatch bed** — Type of bed with springs capable of flexing
- **Hallucination** — Believing that stimuli are present which are not

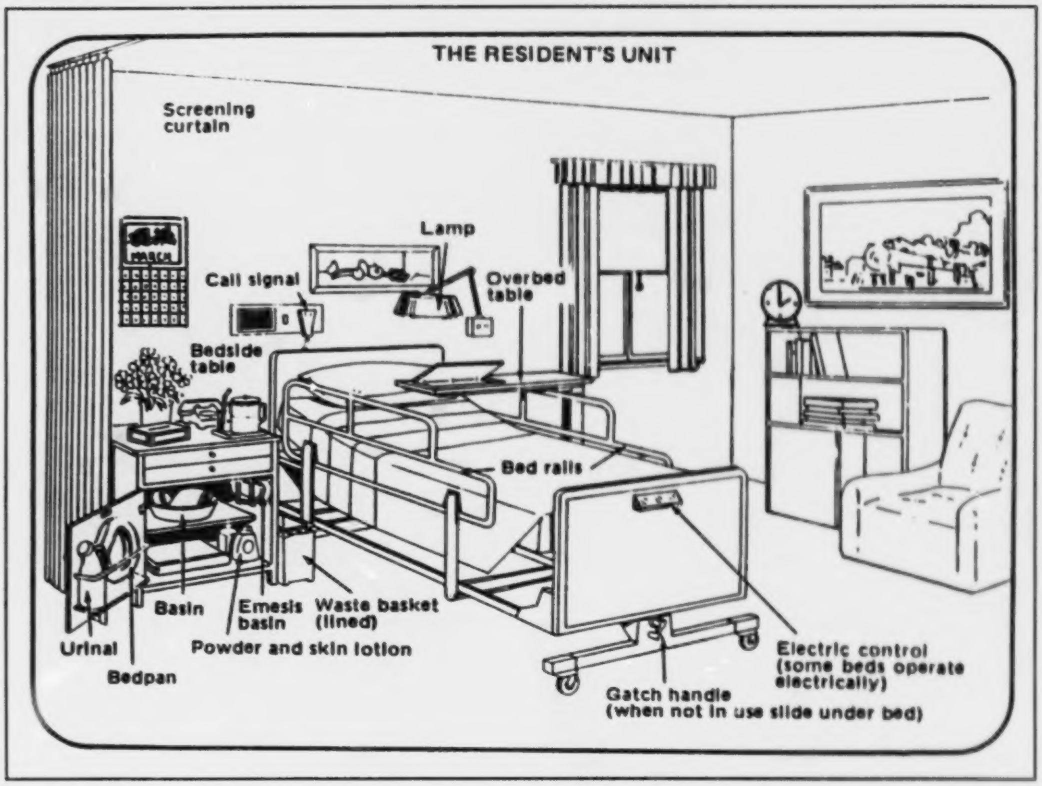
  EXAMPLES: Hearing voices, seeing visions, seeing people who are not there
- **Hazardous** — Capable of being unsafe
- **Humidity** — The amount of moisture in the air
- **Hypnotic** — A medication causing sleep
- **Illusion** — Misinterpretation of stimuli that are present

  EXAMPLES: Mistaking a shadow for a person, or thinking the ringing alarm on a monitor is a doorbell.
- **Insomnia** — Inability to fall asleep
- **Miter** — A method of folding and tucking sheets at the corners of beds
- **Narcolepsy** — A condition where one falls asleep suddenly and inappropriately
- **Nocturnal** — Occurring at night
- **NREM sleep** — Non-rapid eye movement sleep; sleep that is dream free
- **Nursing unit** — The patient care area for which a group of nurses have responsibility; characteristically 10 to 15 patients may comprise a nursing unit
- **Occupied bed** — A bed which has a patient in it; also a technique for making such a bed
- **Open bed** — A bed with the top linens folded back and ready to receive the patient
- **Overbed table** — A tray-like table on wheels which can be easily positioned over the patient's bed

- **Patient's unit** — The area where the patient stays, usually including the bed, bedside table and overbed table
- **Pathogenic** — Disease-producing
- **Post-op bed** — A bed prepared with the top linen folded to one side ready to receive a patient from a stretcher; also called anesthesia or surgical bed
- **Privacy** — The state of being alone
- **REM sleep** — Rapid eye movement sleep; the sleep where dreams occur
- **Sedative** — A medication causing a calming effect
- **Sensory overload** — A state resulting from too much stimulation
- **Sensory deprivation** — A state resulting from lack of stimulation
- **Siderails** — Moveable attachments to the patient bed used to prevent falls from the bed and to provide assistance in moving
- **Sleep deprivation** — A state resulting from lack of sleep
- **Sleep apnea** — A condition where the brain receives an inadequate oxygen supply during sleep
- **Somnambulism** — Sleep-walking
- **Therapeutic** — Having healing value
- **Unoccupied bed** — A bed which does not have a patient in it; also a technique for making such a bed
- **Urinal** — A receptacle for urine
- **Ventilation** — Movement, circulation of air

OBJECTIVE 2 **Identify basic equipment found in the patient unit.**

We use the term *patient unit* to describe the patient's immediate surroundings and furnishings. The term *nursing unit* describes an area of the health care agency managed by one group of nursing personnel and having a number of patient units. The nursing unit may care for five patients in critical care areas or perhaps fifty patients in other areas.


THE RESIDENT'S UNIT
Screening curtain
Lamp
Call signal
Overbed table
Bedside table
Bed rails
Basin
Emesis basin
Waste basket (lined)
Urinal
Powder and skin lotion
Bedpan
Electric control (some beds operate electrically)
Gatch handle (when not in use slide under bed)

Source: Connie A. Will/Judith B. Eighmy, *Being A Long-Term Care Nursing Assistant, 2e*, ©1988, p. 48. Reprinted by permission of Prentice-Hall, Englewood Cliffs, New Jersey.

Beds

Hospital beds are the major pieces of furniture in a patient unit. They are designed to make it easier for the nurse to care for the patient and to be safe and comfortable for the patient. Hospital beds have moving parts which may be operated manually with cranks or with electrical controls. Many beds have electric controls situated so patients can make adjustments for their own comfort.

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Modern hospital beds have a high-low feature which allows the nurse to bring the bed to a comfortable working level while giving care to the patient. This prevents unnecessary strain on the nurse's back. When care is completed, the bed can be returned to a level close to the floor for the patient's safety.

Hospital beds are also usually gatch beds, meaning that the spring portion of the bed can bend at several places. This allows the patient to sit up in bed or to have his/her knees flexed for comfort or for treatment.

Hospital beds also have siderails or bed rails for the patient's safety and comfort. Many patients will be receiving medication which may alter their perceptions of the environment. Their illnesses may also affect their orientation and coordination. Raised siderails may prevent falls from bed or serve to remind patients that assistance may be needed. Siderails may also help patients to reposition themselves in bed or provide assistance when leaving the bed. The siderails may extend the full length of the bed or half the length of the bed. Many agencies have policies which state that siderails must be raised when patients are in bed.

Hospital beds have to allow for easy movement. Moving the bed will often provide more space to complete required care. Wheels should have locks on them to ensure that the bed does not start moving when the patient is trying to enter or leave it.

Some beds also have emergency headboards or footboards. These features are meant to be used if cardiopulmonary resuscitation is necessary. They can be pulled off easily and placed under the patient's chest to provide a firm surface for delivery of chest compressions. The mattress is not firm enough for effective compressions to take place.

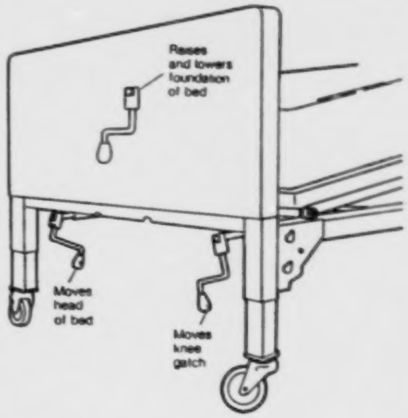
Raises and lowers foundation of bed
Moves head of bed
Moves knee gatch

Figure 1

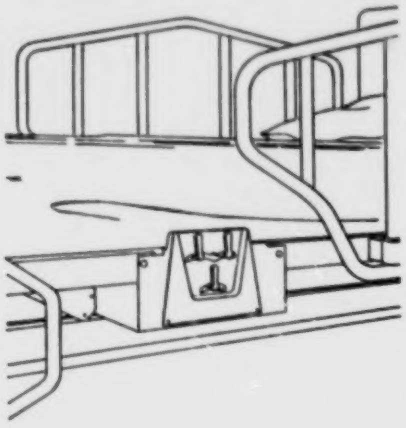

Figure 3

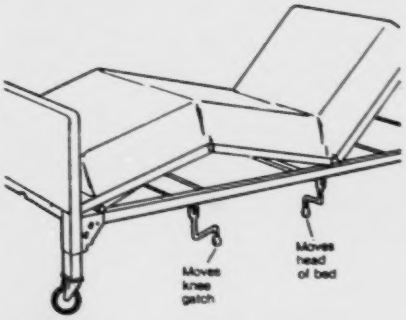
Moves knee gatch
Moves head of bed

Figure 2

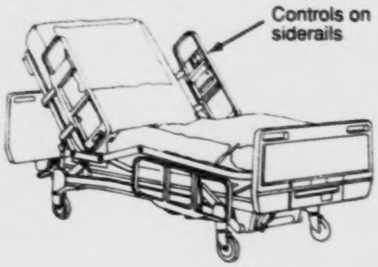
Controls on siderails

Figure 4

Figures 1, 2, and 3: Barbara Kozier/Gloenora Erb *Techniques in Clinical Nursing*, ©1982, p. 417. Reprinted by permission of Addison-Wesley Publishing Company, Menlo Park, California. Figure 4: Used with permission of the Hill-Rom Company, Inc.

Overbed table

This actually resembles a tray on wheels which will fit over the bed. The overbed table allows the patient to eat in bed and to perform personal hygiene measures easily. Many have compartments for storage of items needed in personal hygiene.

Bedside table

The bedside table provides storage for utensils needed in patient care and for some of the patient's belongings. The table may have drawers, a cabinet or both. Some newer patient care areas have built-in bedside tables rather than free-standing tables.

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Clothing storage

Some type of storage area for patient clothing is usually provided. This may be a locker or a closet.

Furniture

A chair is also considered a part of the unit.

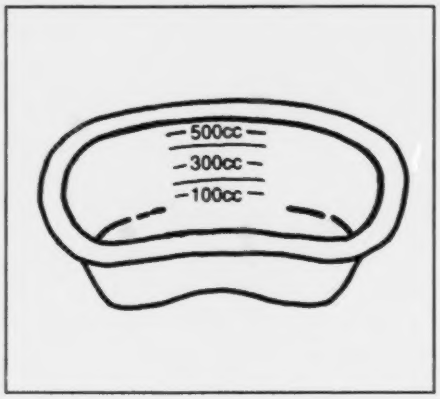
Call light or other communication device

Patients need some means of signaling for assistance. Many call lights are part of an intercom device where the patient's call may be answered from a nurse's station to determine what kind of assistance is needed. Newer beds have the call light built into the siderails. Older systems have a signal cord with a wall plug in.

Utensils

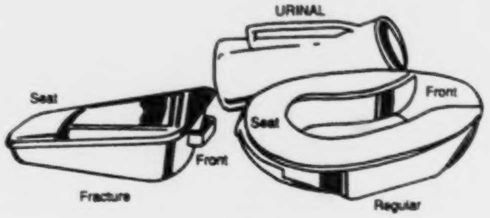
Most institutions provide patients with a bath basin, emesis basin, soap dish, and water pitcher immediately on admission. These are disposable items which the patient may take home upon discharge. Soap, lotion and tissues, are usually provided along with the utensils. All of the utensils are usually stored in the bedside table or at some convenient point in the unit. They should not be allowed to sit out, causing clutter. Many people would find the sight of some items objectionable.

- **Emesis basin** — Frequently used to assist patients with oral hygiene. As the name implies, it may be used if the patient experiences emesis (vomitus).



Used with permission of Faye Abraham.

- **Bedpan and urinal** — Two types of bedpans are available. One is called a fracture pan or orthopedic pan and is useful when movement is limited.



BEDPANS

Source: Connie A. Will/Judith B. Eighmy, *Being a Long-Term Care Nursing Assistant, 2e,* ©1988, p. 232. Reprinted by permission of Prentice-Hall, Englewood Cliffs, New Jersey.

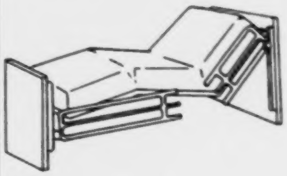
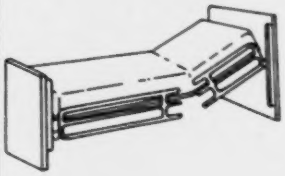
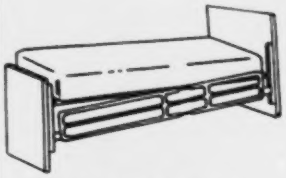
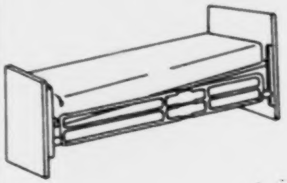
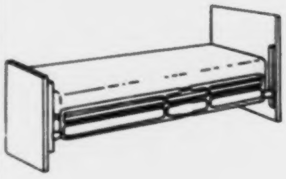
OBJECTIVE 3

Label basic bed positions.

Because of the jointed or gatched springs, hospital beds can assume several positions for providing comfort or for treatment.

(See chart on next page.)

COMMON BED POSITIONS

Position	Description	Uses
Fowler's 	**Fowler's position** — Allows the patient to sit up. Fowler's position can be described as any elevation of the head up to 90 degrees. The terms low-, mid- or high-Fowler's may be used to describe the amount of elevation.	
Semi-Fowler's 	The midpoint range is called semi-Fowler's.	
Trendelenburg 	**Trendelenburg position** — Used primarily for treatment of a patient in shock and requires that the feet be higher than the head	
Reverse Trendelenburg 	**Reverse Trendelenburg position** — Used to accustom the patient to an upright position after lying flat for a long period	
Flat 	**The flat position** — Allows for rest and is also the easiest position for bedmaking	

Source: Potter, Patricia A., and Perry, Anne G.; *Basic Nursing: Theory and Practice*, ed.2, St. Louis, ©1991, Mosby-Year Book, Inc. Used with permission.

OBJECTIVE 4

Choose the best word or phrase to complete statements about ways to control the environment for the patient's comfort and health.

- **Temperature** — We quickly become uncomfortable if our environment is too hot or too cold. For most people, the most comfortable range is between 68 and 74°F.

  Older people often prefer warmer temperatures. They are less active, their circulatory systems are not as efficient as they once were and they probably have decreased stores of body fat, which serves as insulation. During many illnesses, people complain of being too hot or too cold. For a period of time after surgery, patients are frequently cold. The nurse should be aware of all of these possibilities and be prepared to adjust the environment for patients' comfort.

  Many hospital rooms have temperature controls which can be regulated for the comfort of patients in that room. Extra blankets can be provided or removed depending upon circumstances. Electric fans are usually available. The nurse should be sure to consider the patient's comfort during bathing and similar activities, and adjust the temperature accordingly.

- **Humidity** — Humidity is closely related to temperature. Humidities of 40-50% are considered desirable.

  Increased humidity slows rapid evaporation of moisture from the skin and is especially uncomfortable when temperatures are high. Skin becomes dry when humidities are low, leading to an uncomfortable situation for both patients and nurses. Both very high and very low humidities make breathing more difficult.

  Most hospitals have humidity controls built into their heating and air condition systems as a safety feature. Static electricity is easily generated in low humidity and can be a safety hazard in the presence of oxygen and other flammable gases.

  In the home, patients may benefit from dehumidifiers or humidifiers/vaporizers, depending upon the environment and the patient's condition. Characteristically, humidities are higher during the warmer months and lower during the cooler months. An old practice of keeping a pan of water or teakettle boiling on the stove adds moisture to dry winter air.

- **Ventilation** — Ventilation refers to the circulation of air in the environment. Heating and air conditioning systems use fans to redistribute the air. Uncirculated air becomes stale and odors linger. This could become very unpleasant in a health care situation.

  Some patients enjoy feeling the movement of air on them and like to have a small electric fan in the room. Others find increased air movement objectionable. Many hospital windows will not open; but in the home, an open window improves ventilation. If doors to the patient's room can be opened periodically, this may increase air movement.

  Ventilation is very important in the hospital and great care is taken to assure that air from one patient area is not recirculated into another area. This could spread pathogenic organisms.

- **Odors** — Odors are of course related to ventilation, but there are other considerations as well. When people are ill, odors may bother them much more. The smell of food may be unbearable for someone suffering from nausea. Others have allergies to materials used in colognes and similar substances. They may react by sneezing or even having difficulty in breathing in the presence of these materials.

  The nurse can diminish unpleasant odor by promptly removing food trays after meals, emptying bedpans and urinals promptly and disposing of items with body secretions or excretions, such as dressings, promptly. A deodorizer may be helpful for odors that linger after the source is removed.

  Nurses must remember that they are part of the patient's environment and avoid bringing unpleasant odors to the bedside. Frequent bathing and good oral care are absolutely necessary. Strong colognes, perfumes, and after-shave should not be used in the patient care area. Eating foods with strong odors such as onions should be avoided when on duty. The smell of coffee and cigarette smoke on the nurse's breath is objectionable to some patients.

- **Noise** — One of the most frequent complaints related to hospitalization is about the noise. Hospitals can be very noisy places with various pieces of equipment moving through the hallway, alarms sounding on monitoring equipment, phones ringing and people moving about and talking 24 hours a day.

Some of the noise is unavoidable, but the nurse should minimize it as much as possible.

One thing the nurse can certainly do something about is the noise created by talking among the nursing staff. Nurses should avoid yelling down the hall and laughing or talking loudly in or near the patient rooms. This is especially important at night when patients are trying to sleep.

When two patients share the same room, they may have different tolerances for noise. The patient who is hard of hearing may want the television set quite loud while his roommate would prefer not to have it on at all. Sometimes the nurse must use tact and diplomacy to settle differences between patients.

In the home care situation, the patient's tolerance for noise and the activities of the rest of the family may conflict. Once again, it may be the nurse who must help each one see the other's point of view and arrive at acceptable solutions.

- **Light** — Adequate lighting must be provided to identify and assess the patient and to deliver care safely. At the same time, the patient will probably rest better in subdued light. After delivering care, the nurse should dim lights to allow for rest. Most people find it objectionable to have lights glaring in their eyes at any time.

  Adequate lighting for reading and completing personal hygiene should be supplied to the patient able to complete these activities. The patient who will be up and around should also have light to avoid accidents. Night lights mounted close to the floor will not usually interfere with sleeping, but they do provide light for the patient who gets up during the night and for the nurse who enters the room to provide care. Night lights can be easily purchased for use in the home as well.

  Patients may react with alarm if they are suddenly awakened by lights turned on without any warning. This is something the nurse working at night should keep in mind. The patient should first be aroused and told that lights must be turned on to complete care.

- **Cleanliness** — We think of hospitals as clean places, but they can become dirty, cluttered places without constant attention to keeping patient areas neat and clean. Cleanliness is an important safety factor. Providing for medical asepsis is a constant concern of nurses. This means keeping all areas free of potential pathogenic or disease-producing organisms.

  Removing used supplies and equipment as quickly as possible after use will help avoid unnecessary clutter as well as odor. Damp-dusting all furniture in the patient unit should be carried out by the nurse. Trash should be emptied if used items containing body secretion or excretions are placed there or if it becomes too full. Trash baskets used in the sick room should be lined with plastic bags for safe, easy disposal.

  The patient may collect a number of items such as newspapers, empty cups, greeting cards and dying flowers. The nurse should use judgement and follow the patient's wishes in discarding or storing these items. The patient should be told or shown whenever possible where items are being stored. If allowed to accumulate at the bedside, they could take up space needed for items needed in treatment and can contribute to falls, if on the floor.

  Rearrangement of furniture in the home care situation may be necessary to provide for a safe and efficient area. Cleaning should be carried out at regular intervals. The nurse may need to point out areas of possible contamination and teach family caregivers how to safely handle soiled material.

- **Privacy** — The patient's environment should provide privacy. Being sick should not mean being on public display. When we provide privacy for our patients, we are communicating respect for them. It can add to the patient's sense of self-esteem.

  In order to provide privacy, the nurse should close doors during treatments which would expose patient. It is often wise to put a small sign on the door indicating that a bath or treatment is in progress. Others will know to knock first and avoid embarrassment to themselves, the patient, or both. Curtains should be pulled between beds in semi-private rooms before exposing the patient. Drapes or shades can be drawn at windows to avoid displaying the patient to those outside.

Using appropriate draping techniques during examinations and exposing only body parts necessary for examination or treatment will assure privacy. It is usually wise to ask visitors to leave before proceeding with treatments which would expose the patient. If family members need to learn the techniques being used, they should stay.

In out-patient settings, such as one-day surgery or emergency rooms, it may be more difficult to provide privacy. Curtains may be the dividers in a room with a number of patients. The nurse should be very careful to avoid embarrassing the patients in these settings.

- **Stimulation** — A patient in a private room with no visitors and little contact with the nursing staff could develop sensory deprivation. A patient in an intensive care unit with constant light, sounds, movement and confusion could suffer sensory overload.

  The symptoms of both are actually similar. They can vary from unexplained fatigue from mild deprivation or overload to severe symptoms such as disorientation, illusions, or hallucinations.

  A safe and comfortable environment really means protecting our patient physically and psychologically. If we listen to patients' complaints, they are often complaining about something which a caring nurse could easily change. When we provide blankets for warmth, use air freshener, pull curtains for privacy, or damp-dust our patient's unit, we are making the surroundings more pleasant and safe. These things do not take much time or effort, but they mean a lot to our patients.

OBJECTIVE 5

Describe the two types of sleep.

Research indicates that there are five distinct stages of sleep. These stages are based on the movement of the eyes during sleep and form cycles which last about 90 minutes. The cycles are repeated 4 to 6 times a night. The first 4 stages are referred to as Stages I through IV and are called **NREM** (non-rapid eye movement) sleep. The fifth stage is called **REM** (rapid eye movement) sleep. REM sleep is the time when dreaming takes place.

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REM sleep seems to play a part in psychological restoration while NREM sleep has a greater role in physiological restoration. Both REM and NREM sleep are important. When an individual is deprived of one or the other, the body compensates by spending more time in that area when sleep again occurs. The nurse can better understand why patients behave the way they do when awake and asleep with knowledge of sleep patterns.

What Happens During Sleep?

NREM Sleep

During Stage I the person begins to fall asleep. The slightest disturbance in the environment can arouse him. This stage lasts a short time.

During Stage II, sleep deepens, but arousal is still very easy.

Stage III sleep is still deeper and Stage IV sleep is deep sleep. Arousal from Stage IV is difficult.

During NREM sleep, pulse, respiratory and blood pressure rates fall. The temperature falls and urine production decreases. Physiological restoration of the body occurs during this period, especially during Stage IV. NREM sleep occurs early in the night and as the body becomes more rested, less time is spent in NREM sleep and more time is spent dreaming.

REM Sleep

The REM stage is the dreaming part of sleep. Eye movements increase and can even be seen through closed lids during this stage. Electroencephalograms (EEG) show an increase in brain wave activity. Pulse and respiratory rates increase and hormone activity increases. REM sleep seems to be important in maintaining adequate psychological functioning. People deprived of REM sleep become irritable and anxious.

OBJECTIVE 6

Choose the best word or phrase to complete statements about factors that affect sleep patterns.

One of the most common complaints of the hospitalized patient is that of lack of rest and sleep. It is true that the work of a hospital continues 24 hours a day, but the goal of this work is to help patients regain health, and rest is a part of the process. An understanding of sleep will help the nurse provide an atmosphere for rest and recuperation.

- **Age** — Newborns spend most of their time in sleep, while adults can perform with a third or less of each day spent in sleep. As people grow older, they awaken more during the night.
- **Medications** — Sleeping medications which contain barbiturates depress REM sleep. This means that patients may be helped to get to sleep and remain asleep and yet feel irritable during the day.
- **Circadian rhythms** — Can help the nurse understand sleep patterns and general behavior observed in patients. These patterns are individual, based on life style and learned behaviors. The patient who normally works nights and sleeps days will follow that pattern during hospitalization. Some people require more sleep than others. The individual's circadian rhythm will have peak times and down times for a variety of activities.

OBJECTIVE 7

Select factors that interfere with sleep and the nursing actions that can be used to overcome these factors.

FACTORS THAT INTERFERE WITH SLEEP

- **Temperature** — If the patient is too hot or too cold, sleep may not be possible. The nurse can adjust thermostats, provide blankets or remove excess bedding to aid sleep.
- **Lights** — Should not be allowed to interfere with the patient's sleep. Dimming lights and preventing lights from shining directly in the patient's eyes can help. Some patients feel more secure when there is a night light in the environment to help orient them when they awaken in the dark. The night light is helpful for them.

- **Noise** — Every effort should be made to speak and work quietly when patients may be sleeping. The noise of nurses talking can prevent and disturb patients' sleep. Telephones should be answered as promptly as possible, and monitor alarms investigated and silenced quickly.

- **Emotional factors** — Sometimes the night can bring out feelings of loneliness and fear. Patients may need some company or someone to talk to. If the nurses can spend some time listening to the patient, this may allow the patient to relax and sleep.

- **Lack of exercise during daytime hours** — May lead to restlessness at night. The patient's care might include suitable exercise in the afternoon or early evening to assist with sleep. Vigorous exercise just before bedtime can sometimes interfere with sleep.

- **Overstimulation** — Patients may become overstimulated or excited by visitors or activities, and be unable to sleep. The wise nurse may need to intervene or impose limitations so the patient can rest.

- **Pain** — Measures to relieve pain should be used when appropriate to allow the patient to rest.

NURSING ACTIONS

- Respect the patient's normal patterns as much as possible. Adjust hospital routines when possible to allow the patient to sleep and wake up at usual times. Many patients have bedtime rituals which help achieve sleep. This may include personal hygiene measures, reading, watching TV, or similar activities. When possible, allow the patient to continue these as usual.

- Help the patient assume a comfortable position for sleep. This is especially important for people who have had surgery or who have limited movement. Along with the change in position, a backrub may go a long way in providing rest for aching muscles. The nurse should make sure that bed linens are straight, clean and dry.

- The late night snack may be a useful nursing measure. Patients may have been limited in what they could eat during the daytime because of diagnostic procedures or their illness. Suddenly restrictions are gone or they are feeling better, but it is not mealtime. Their hunger may interfere with getting to sleep. Foods and beverages containing caffeine (including coffee, tea, cola drinks, and chocolate) may interfere with sleep. Milk and dairy products contain the protein substance L-tryptophan, which seems to help with sleep. Thus, the old remedy of warm milk really has some scientific basis.

Medications — Some patients have adverse reactions including disorientation and lack of coordination. Other interventions should be used first to avoid creating problems that can accompany these medications. The elderly are especially sensitive to the effect of sleep preparations. Some depress REM sleep and thus do not allow for true rest. Medications should be used after other measures have been carried out.

OBJECTIVE 8

Choose the best word or phrase to complete statements about conditions to observe during sleep.

Nurses who understand sleep patterns can make observations during sleep to assist other medical professionals and the patient. These observations add to the data base and may help in establishing nursing diagnoses.

They also help in evaluation of nursing and medical measures. If the patient sleeps after specific nursing measures are carried out, such as position changes, those interventions can be judged to be successful. The effectiveness of sleeping medications can be evaluated. Some treatments may also interfere with sleep, and this too may be observed. For instance, pelvic traction may prevent the patient from sleeping.

Patients may be unaware of the problem or of ways to correct the problem. But once problems are observed, nursing or medical measures can be instituted to attempt to correct them. Some specific problems are:

- **Enuresis (bedwetting)** — This is the condition that occurs more frequently with children, but with some adults as well.

- **Somnambulism (sleepwalking)** — Can be amusing or dangerous depending on the circumstances. The sleepwalker is not aware of what is taking place.

  NOTE: Both enuresis and somnambulism are most likely to occur during Stage IV sleep.

- **Sleep apnea** — Middle-aged men are the group most often affected. It may occur repeatedly during the night. Snoring may accompany sleep apnea. People suffering from sleep apnea often report feeling chronically tired.

- **Insomnia** — Many people suffer from this problem and the nurse may be able to offer suggestions to help.

- **Narcolepsy** — Sometimes described as an attack of sleep, a disorder that could cause serious consequences. Victims fall asleep suddenly at inappropriate times, such as when stopped at a red light while driving a car.

OBJECTIVE 9

Discuss bedmaking.

During hospitalization, patients spend most of their time in bed. It is the center of the patient's environment. Therefore, it should be a comfortable part of the environment. A correctly made bed will add to the patient's comfort.

Advantages of making a bed correctly

- Saves time.
- Can make other procedures easier to accomplish, for example, moving the patient in bed and transferring the patient to a chair or stretcher.
- Is safer for the patient. Handling linens correctly will prevent the spread of pathogenic organisms.
- Is more comfortable for the patient. Wrinkles are uncomfortable. A smooth bed will also help prevent skin problems.
- Can protect the nurse. Making a bed correctly involves the use of good body mechanics which protects the nurse from injury.

- Makes the environment neater and more pleasant for the patient.

Types of linens used in bedmaking

In general, six pieces of linen are used in bedmaking:

- **Mattress pad** — Made of heavy cotton and serves as a kind of cushion and barrier between the patient and the vinyl covering of the mattress.

- **Bottom sheet** — May be flat or fitted sheet.

- **Draw sheet** — May be folded from a flat sheet or be a specially constructed small sheet meant to fit across the middle portion of the bed, covering the area where most of the patient's body touches the bed. It is useful in that it can easily be changed without changing the entire bottom sheet. It can also be pulled tight to provide a smooth surface for the patient to lie on.

- **Top sheet** — Flat sheet which covers the bottom linen and the patient

- **Bedspread** — Traditionally white cotton bedspreads covered the hospital bed, but today a thermal type of blanket or a brightly printed spread may serve the purpose.

- **Pillow case** — Covers the pillow and is the last piece of linen to be placed

- **Bath blanket** — An optional piece, used to cover the patient when the top linens are removed. Often the bed is made just after the bath is completed and the bath blanket will be in place.

Linens may be omitted or added to suit the desires and needs of the patient. Mattress pads and draw sheets may be omitted for patients who do not spend a lot of time in bed. Blankets may be added between the top sheet and the bedspread. Waterproof draw sheets may be found between the bottom sheet and the cotton drawsheet. Disposable linen savers are frequently used to protect the bottom linens. These are usually rectangular pads made of paper and vinyl.

Guidelines for handling linens during bedmaking

- Wash hands before handling clean linens and after handling soiled linens.
- Linens removed from the linen room should not be returned. They should instead be stored in a clean area of the patient's room for future use.
- Linens that fall on the floor should be discarded. The floor always has the potential to be heavily contaminated by pathogenic organisms which could be transferred to the patient.
- Do not carry linens next to the uniform. Clean linens can be contaminated by organisms on the uniform and dirty linen will contaminate the uniform.
- To avoid the transfer of pathogens, remove linen from the bed by folding the portion which has been next to the patient to the inside.
- Do not shake or throw dirty linen. This spreads airborne pathogens.
- Lay linen on the bed rather than waving it and allowing it to fall into place. This could "stir up" dust and airborne pathogens.
- Keep clean and dirty linens separate to avoid contaminating the clean linen.
- Avoid smoothing linen with hands because hands carry pathogens. Instead, straighten linens by pulling.

Types of bedmaking

- **Closed bed** — The top linens are pulled to the head of the bed with the sheets covered
- **Open bed** — The top linens are pulled down so the bed is ready to receive the patient

  NOTE: The technique of folding the linens back upon itself ready to be pulled up to cover the patient is called fanfolding.

- **Occupied bed** — Changing the linens with the patient in the bed.

- **Unoccupied bed** — Changing the linens when the patient is out of the bed.

- **Post-op, anesthesia, or surgery bed** — The top linens are folded to the side of the bed to provide more space for positioning a patient in bed. (See Supplement.)

  NOTE: This is useful when the patient has been to surgery or some other procedure and will be returning by stretcher. The nurse will use judgement along with the orders of the physician to determine which type of bed should be made for the patient.

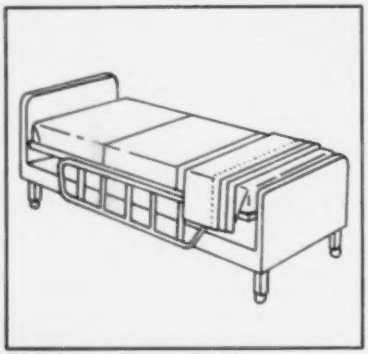

Figure 6 Open Bed*

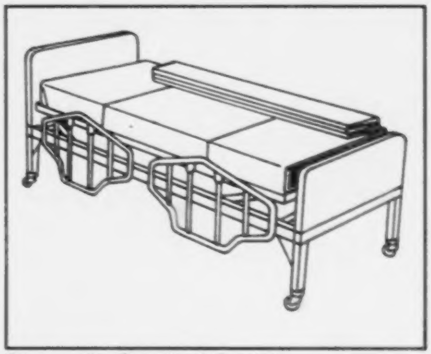

Figure 7 Surgical Bed**

*Source: Belland/Wells: *Clinical Nursing Procedures*, ©1986, Boston: Jones and Bartlett Publishers, p. 21. Reprinted by permission.

**Source: Sorrentino, Sheila A.; *Textbook for Nursing Assistants*, ed. 2, St. Louis, ©1987, The C.V. Mosby Company. Used with permission.

MAKING A POST-OP BED.

EQUIPMENT

- Linens for unoccupied bed

PROCEDURE

Assessment and Analysis

1. Check for special needs of patient.
2. Wash hands.
3. Obtain clean linen and take to bedside.

Implementation

4. Place bottom linen as for unoccupied bed.
5. Place top linen, but do not tuck in at foot of bed.
6. Fold back top linen over foot of bed and even with foot of mattress.
7. Fold top linens back from head and foot over middle third of bed.
8. Fanfold top linens back to the side of bed away from doorway.
9. Place pillow on bed or area designated by hospital policy.

Evaluation

1. Smooth, wrinkle-free surface
2. Top covers folded back out of way
3. Necessary items at bedside
4. High position
5. Call light available

JOB SHEET 1

PREPARE A PATIENT'S ENVIRONMENT

V

OBJECTIVE 10a

Prepare a patient unit.

INTRODUCTION

Patients will feel more welcome and comfortable if the environment is prepared and ready for them when they arrive at their units.

EQUIPMENT AND SUPPLIES

- Patient care or patient admission kit (Bath basin, emesis basin, water pitcher, tissue, lotion) or comparable items.
- Patient gown
- Any other items required by facility

PROCEDURE

Functional Reading Skills
- Follow written instructions

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes

Assessment and Analysis

1. If possible, find out any special needs or equipment to be planned for before the patient arrives.

   EXAMPLE: IV pole

2. Check for cleanliness and completeness of unit.

Planning

3. Obtain patient care or patient admission kit.

4. Obtain patient gown.

Implementation

5. Fan-fold linens to foot of bed.

6. Place gown on bed.

7. Open patient care or patient admission kit and place items in appropriate places.

   NOTE: Be sure to label items with patient's name after patient arrives.

8. Place any other items where they will be readily available.

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9. Place bed at lowest position unless it is certain that the patient will arrive by stretcher.

Evaluation

10. Check to see that unit appears neat and ready.

PREPARE A PATIENT'S ENVIRONMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why employability skills are important.
- Discuss with them the following skills which are relevant to this task.

  READING SKILLS

  — Following written instructions

  EMPLOYABILITY SKILLS

  — Mastering specific job task/procedure

  — Applying safety practices/procedures

  — Developing good work habits/attitudes

- If students have difficulty following written instructions:

  — Discuss the possible consequences of not following instructions precisely.

  — Have them read the instructions several times, noting the key words and ideas.

- If students have difficulty mastering a specific job task/procedure:

  — Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.

  — Suggest they study each component of the procedure to determine which area is causing difficulty.

  — Review the entire procedure.

  — Team them with proficient students or professionals to practice the procedure.

- If students have difficulty applying safety practices/procedures:
    - Discuss the reasons for, and importance of, safety practices.
    - Review the safety procedures relevant to the specific task.
- If students have difficulty developing good work habits/attitudes:
    - Encourage them to become familiar with the entire procedure before they begin the work.
    - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
    - Discuss what behaviors and attitudes constitute good work habits.
    - Make sure the student knows what is expected of him or her.

JOB SHEET 2 PREPARE A PATIENT'S ENVIRONMENT

V

OBJECTIVE 10b **Make an unoccupied bed.**

EQUIPMENT AND SUPPLIES

- Mattress pad
- Fitted or flat sheet
- Draw sheet
- Flat sheet
- Bedspread
- Pillow case

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes

Assessment and Analysis

1. Check activity order for patient.
2. Assess patient.
3. Check conditions of linen on bed.

   NOTE: If linens have been soiled by body secretions, use universal precautions.

4. Check for special needs of patient.

Planning

5. Wash hands.
6. Obtain hamper or bag.
7. Obtain clean linen, picking up items in order of use.
8. Take linen to bedside and place in a clean area, reversing stack so item to be used first is on top of stack.

Implementation

9. Lock wheels and remove attached equipment.
10. Raise bed to convenient working height and put it in flat position.

11. Remove soiled linen.

    NOTE: If linens have been soiled by body secretions, use universal precautions.

12. Place in hamper or bag and place in suitable location (not on floor).

13. Wash hands.

14. Place mattress pad on mattress.

15. Place bottom sheet on the bed with rough edge of hem facing downward, hem even with the foot of the mattress, and middle of sheet near the center of the bed.

    NOTE: If fitted sheets are available, place over one-half of bed with mattress corners fitted securely into corners of sheet.

16. Tuck sheet smoothly under head of mattress.

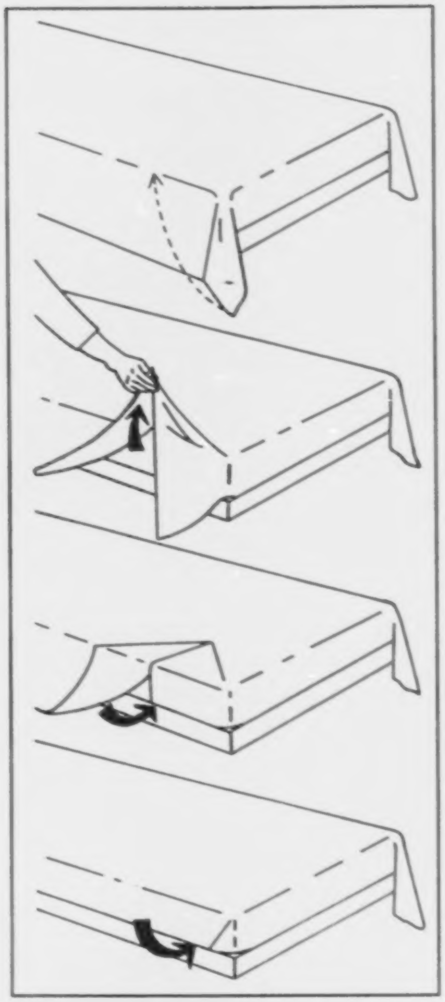
17. Make a mitered corner at head of mattress.

    a. Pick up edge of sheet so it forms a triangle, with the edge of the sheet held perpendicular to the mattress.

    b. Lay folded corner on mattress.

    c. Tuck hanging part under mattress.

    d. Hold sheet in place against mattress and with other hand, pick up corner of folded part and tuck in under mattress.



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18. Tuck in sheet starting from the head and working toward foot.

19. Place draw sheet on bed and tuck in snugly under mattress.

20. Place top sheet on the bed with rough edge of hem facing upward, edge even with head of mattress, and middle of sheet near the center of the bed.

21. Place bedspread on bed with edge at head of bed and even with lower edge of hem.

22. Fold hem back over spread for finished appearance.

23. Tuck topsheet and bedspread together under foot of bed.

24. Miter corner, but let linens hang free instead of making last tuck.

25. Move to opposite side of bed.

26. Pull bottom linen across bed, mitering corner of bottom sheet at head of bed and tucking in from head to foot.

27. Pull draw sheet tight and tuck in securely.

28. Straighten top linens tucking in top sheet and bedspread at foot, mitering corner, but letting linens hang free instead of making last tuck.

29. Put pillow in pillow case using proper technique.

30. Place pillow at head of bed with open end away from doorway.

Evaluation

31. Evaluate.

    a. Smooth, wrinkle-free surface.

    b. Tight corners.

    c. Low position.

    d. Call light attached in appropriate place.

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PREPARE A PATIENT'S ENVIRONMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for: READING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

  READING SKILLS

  - Interpreting forms and records
  - Following written instructions

  EMPLOYABILITY SKILLS

  - Mastering a specific job task/procedure
  - Applying safety practices/procedures
  - Developing good work habits/attitudes
- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 3

PREPARE A PATIENT'S ENVIRONMENT

V

OBJECTIVE 10c Make an occupied bed.

EQUIPMENT AND SUPPLIES

- Mattress pad
- Fitted or flat bottom sheet
- Drawsheet
- Flat top sheet
- Bedspread
- Pillow case
- Bath blanket

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Assessment and Analysis

1. Check activity order for patient.

2. Check orders for restrictions related to position.

3. Assess patient.

4. Check condition of linen on bed.

   NOTE: If linens have been soiled by body secretions, use universal precautions.

5. Check for special needs of patient.

Planning

6. Wash hands.

7. Obtain hamper or linen bag.

8. Obtain clean linen, picking up items in order of use.

9. Take linen to bedside and place in a clean area, reversing stack so item to be used first is on top of stack.

Implementation

10. Explain procedure to patient.

11. Provide privacy.

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes

12. Make sure wheels are locked.
13. Raise bed to convenient working height, and remove any attached equipment.
14. Loosen top linen.
15. Remove bedspread. Fold and hang over back of chair if it is to be reused.
16. Place bath blanket over top sheet.
17. Remove top sheet by carefully pulling out from under bath blanket.
18. Make sure siderail is secured, and assist patient in turning to side.
19. Loosen bottom linen.
20. Fold bottom linen close to patient.
21. Straighten mattress pad if reused or place clean one, folding to center of bed under used linen.
22. Position clean sheet with rough edge of hem facing downward, hem even with the foot of the mattress, and middle of sheet near the center of the bed.
23. Fold sheet to center of bed as close to patient as possible.
24. Tuck sheet under head of mattress.
25. Make a mitered corner at head of mattress.
26. Tuck in sheet, starting from the head and working toward the foot.
27. Place draw sheet on bed, folding to center of bed as close to patient as possible and tuck in free end snugly under mattress.
28. Assist patient to turn onto clean linen.
29. Raise siderail, checking to be sure it is secure.
30. Move to opposite side of bed.

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31. Pull soiled bottom linens off bed and place in hamper or bag.

32. Pull clean linen toward self, tucking bottom sheet at head of bed, mitering corner and tucking in sheet, starting from the head and working toward foot.

33. Pull draw sheet tight and tuck in securely.

34. Assist patient to turn onto back.

35. Place clean top sheet with rough edge of hem facing upward over bath blanket with top edge at patient's chin.

36. Carefully pull bath blanket out from under top sheet.

37. Place bedspread on bed with top edge even with lower edge of hem.

38. Fold hem down over spread for neat appearance.

39. Tuck top sheet and bedspread together under foot of bed and miter corner, letting linens hang free and even instead of making last tuck.

40. Raise siderail and move to opposite side of bed.

41. Repeat tuck and miter for top linens.

42. Grasp top linens over foot and pull upward to assure adequate space for toes.

43. Replace pillow case on pillow using proper technique.

44. Place pillow under patient's head with open end away from doorway for neat appearance.

45. Make patient comfortable.

46. Raise siderails and place bed in low position.

47. Make sure call light is within patient's reach.

48. Take soiled linen to designated area.

49. Wash hands.

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Evaluation

50. Evaluate
    - a. Linens neat and wrinkle free.
    - b. Patient comfortable.
    - c. Adequate toe room.
    - d. Bed in low position
    - e. Siderails up
    - f. Call light in place

PREPARE A PATIENT'S ENVIRONMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for: READING SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Following written instructions
- Interpreting forms and records

ORAL COMMUNICATION

- Applying active listening skills
- Giving/following oral directions
- Analyzing/applying non-verbal communication
- communicating with clients/customers/patients

INTERPERSONAL OR RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes

- If students have difficulty applying active listening skills:
  - Encourage them to familiarize themselves with the patient's history before beginning the procedure.
  - Have them practice listening and then repeating the information.

    EXAMPLE: Patient: "I can't roll over on my left side."
    Student: "Let me help roll you onto your left side."

  - Suggest that they be ready to listen before beginning the communication.
  - Stress the importance of focusing on the speaker.
  - Remind them that maintaining eye contact enhances listening ability.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions are begun.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty analyzing/applying non-verbal communication:
  - Discuss some ways in which patients reveal information non-verbally.

    EXAMPLE: Facial expressions, Tone of voice, Movements, Body position, Mannerisms

  - Discuss some ways in which the student can convey information non-verbally.

    EXAMPLE: The student can convey concern for the comfort and self-esteem of the patient by providing privacy during the procedure.

- If students have difficulty communicating with or interacting with patients, review listening skills, giving/following oral directions, and non-verbal communication skills.

- If students have difficulty obtaining confidence of others:
  - Suggest they review communication and interpersonal or relating skills.
  - Suggest they review appropriate behavior.
  - Suggest that they review the procedure and the part they play in the procedure.
  - Review the proper appearance for a professional.
  - Discuss the importance of having a positive attitude.
  - Discuss with a trusted professional the reasons that may be contributing to the lack of confidence.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplements for Job Sheets 1 and 2.

PRACTICAL TEST 1

PREPARE A PATIENT'S ENVIRONMENT

V

JOB SHEET 1

Prepare a patient unit.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. If possible, found out any special needs or equipment to be planned for before the patient arrives.	_____	_____
2. Checked for cleanliness and completeness of unit.	_____	_____
3. Obtained patient care kit.	_____	_____
4. Obtained patient gown.	_____	_____
5. Fan-folded linens to foot of bed.	_____	_____
6. Placed gown on bed.	_____	_____
7. Opened patient care kit and placed items in appropriate places.	_____	_____
8. Placed any other items where they will be readily available.	_____	_____
9. Placed bed at lowest position unless it is certain that the patient will arrive by stretcher.	_____	_____

	YES	NO
10. Checked to see that unit appears neat and ready.	____	____

EVALUATOR'S COMMENTS

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Unit appears neat and ready	4	3	2	1
Appropriate items are provided	4	3	2	1

EVALUATOR'S COMMENTS

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 2

PREPARE A PATIENT'S ENVIRONMENT

JOB SHEET 2

Make an unoccupied bed.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked activity order for patient.	_____	_____
2. Assessed patient.	_____	_____
3. Checked conditions of linen on bed.	_____	_____
4. Checked for special needs of patient.	_____	_____
5. Washed hands.	_____	_____
6. Obtained hamper or bag.	_____	_____
7. Obtained clean linen, picked up items in order of use.	_____	_____
8. Took linen to bedside and placed in a clean area reversed stack so item used first was on top of stack.	_____	_____

	YES	NO
9. Locked wheels and removed attached equipment.	____	____
10. Raised bed to convenient working height and put it in flat position.	____	____
11. Removed soiled linen.	____	____
12. Placed in hamper or bag and placed in suitable location.	____	____
13. Washed hands.	____	____
14. Placed mattress pad on mattress.	____	____
15. Placed bottom sheet on bed with rough edge of hem facing downward, hem even with the foot of the mattress, and middle of sheet near the center of the bed.	____	____
16. Tucked sheet smoothly under head of mattress.	____	____
17. Made a mitered corner at head of mattress.	____	____
a. Picked up edge of sheet so it formed a triangle, with the edge of the sheet held perpendicular to the mattress.	____	____
b. Laid folded corner on mattress.	____	____
c. Tucked hanging part under mattress.	____	____
d. Held sheet in place against mattress and with other hand, picked up corner of folded part and tucked in under mattress.	____	____

	YES	NO
18. Tucked in sheet starting from the head and working toward foot.	____	____
19. Placed draw sheet on bed and tucked in snugly under mattress.	____	____
20. Placed top sheet on the bed with rough edge of hem facing upward, edge even with head of mattress, and middle of sheet near the center of the bed.	____	____
21. Placed bedspread on bed with edge at head of bed even with lower edge of hem.	____	____
22. Folded hem back over spread for finished appearance.	____	____
23. Tucked top sheet and bedspread together under foot of bed.	____	____
24. Mitered corner, but let linens hang free instead of making last tuck.	____	____
25. Moved to opposite side of bed.	____	____
26. Pulled bottom linen across bed mitering corner of bottom sheet at head of bed and tucking in from head to foot.	____	____
27. Pulled draw sheet tight and tucked in securely.	____	____
28. Straightened top linens tucking in top sheet and bedspread at foot and mitering corner letting linens hang free instead of making last tuck.	____	____
29. Put pillow in pillow case using proper technique.	____	____
30. Placed pillow at head of bed with open end away from doorway.	____	____

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Smooth, wrinkle-free surface	4	3	2	1
Tight corners	4	3	2	1
Low position	4	3	2	1
Call light attached in appropriate place	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key".

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

JOB SHEET 3

Make an occupied bed.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked activity order for patient.	_____	_____
2. Checked orders for restrictions related to position.	_____	_____
3. Assessed patient.	_____	_____
4. Checked condition of linen on bed.	_____	_____
5. Checked for special needs of patient.	_____	_____
6. Washed hands.	_____	_____
7. Obtained hamper or linen bag.	_____	_____
8. Obtained clean linen, picked up items in order of use.	_____	_____
9. Took linen to bedside and placed in a clean area,reversed stack so item used first was on top of stack.	_____	_____
10. Explained procedure to patient.	_____	_____

	YES	NO
11. Provided privacy.	____	____
12. Made sure wheels were locked.	____	____
13. Raised bed to convenient working height.	____	____
14. Loosened top linen.	____	____
15. Removed bedspread, folding and hanging over back of chair if it is to be reused.	____	____
16. Placed bath blanket over sheet.	____	____
17. Removed top sheet by carefully pulling out from under bath blanket.	____	____
18. Made sure siderail was fastened and assisted patient in turning to side.	____	____
19. Loosened bottom linen.	____	____
20. Folded bottom linen close to patient.	____	____
21. Straightened mattress pad, if reused, or placed clean one, folding to center of bed under used linen.	____	____
22. Positioned clean sheet with rough edge of hem facing downward, hem even with the foot of the mattress, and middle of sheet near the center of the bed.	____	____
23. Folded to center of bed as close to patient as possible.	____	____
24. Tucked sheet under head of mattress.	____	____
25. Made a mitered corner at head of mattress.	____	____

	YES	NO
26. Tucked in sheet, starting from the head and working toward the foot.	____	____
27. Placed draw sheet on bed, folding to center of bed as close to patient as possible and tuck in free end snugly under mattress.	____	____
28. Assisted patient to turn onto clean linen.	____	____
29. Raised siderail, checking to be sure it was secure.	____	____
30. Moved to opposite side of bed.	____	____
31. Pulled soiled bottom linens off bed and placed them receptacle or some area away from clean linens.	____	____
32. Pulled clean linen toward self, tucking bottom sheet at head of bed, mitering corner and tucking in sheet, starting from the head and working toward foot.	____	____
33. Pulled draw sheet tight and tucked in securely.	____	____
34. Assisted patient to turn onto back.	____	____
35. Placed clean top sheet over bath blanket with rough edge of hem facing upward and with top edge at patient's chin.	____	____
36. Carefully pulled bath blanket out from under top sheet.	____	____
37. Placed bedspread on bed with top edge even with lower edge of hem.	____	____
38. Folded hem down over spread for neat appearance.	____	____

	YES	NO
39. Tucked top sheet and bedspread together under foot of bed and mitered corner, letting linens hang free and even instead of making last tuck.		
40. Raised siderail and moved to opposite side of bed.		
41. Repeated tuck and miter for top linens.		
42. Grasped top linens over foot and pulled upward to assure adequate space for toes.		
43. Replaced pillow case on pillow using proper technique.		
44. Placed pillow under patient's head with open end away from doorway.		
45. Made patient comfortable.		
46. Raised siderails and placed bed in low position.		
47. Made sure call light was within patient's reach.		
48. Took soiled linen to designated area.		
49. Washed hands.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Linens neat	4	3	2	1
Patient comfortable	4	3	2	1
Adequate toe room	4	3	2	1
Bed in low position	4	3	2	1
Siderails up	4	3	2	1
Call light in place	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

WRITTEN TEST

PREPARE A PATIENT'S ENVIRONMENT

V

NAME ______________________ SCORE ________

OBJECTIVE 1

Match terms associated with the patient's environment to their correct definitions.

Part 1

______1. Disease-producing

______2. The amount of moisture in the air

______3. A method of folding and tucking sheets at the corners of bed

______4. The state of being alone

______5. A piece of linen used across the middle portion of the patient's bed

______6. Movement, circulation of air

______7. Freedom from disease-producing organisms

______8. Surroundings

______9. Capable of being unsafe

______10. Type of bed with springs capable of flexing

a. Asepsis

b. Bath blanket

c. Draw sheet

d. Environment

e. Gatch bed

f. Hazardous

g. Humidity

h. Miter

i. Nursing unit

j. Pathogenic

k. Privacy

l. Siderails

m. Therapeutic

n. Urinal

o. Ventilation

Part 2

_______1. Misinterpretation of stimuli that are present

_______2. Medication causing sleep

_______3. Receptacle used for feces or urine

_______4. Kidney-shaped receptacle used in oral hygiene and when a patient is vomiting

_______5. Sleep-walking

_______6. Tray-like table on wheels which can be easily positioned over the patient's bed

_______7. Inability to fall asleep

_______8. State of being unaware of person, place, or time

_______9. Bed-wetting

______10. A condition where one falls asleep suddenly and inappropriately

a. Bedpan
b. Disorientation
c. Emesis basin
d. Enuresis
e. Hallucination
f. Hypnotic
g. Illusion
h. Insomnia
i. Narcolepsy
j. Overbed table
k. Sedative
l. Sleep apnea
m. Somnambulism
n. Tranquilizer
o. Urinal

Part 3

_______1. The area where the patient stays, usually including the bed, beside table and overbed table

_______2. Moveable attachments to the patient bed used to prevent falls from the bed and to provide assistance in moving

_______3. A means of signaling for assistance

a. Call light
b. Closed bed
c. Emergency headboard
d. Emesis basin
e. Fracture bedpan
f. Nursing unit

______4. A bed with top linens folded back and ready to receive the patient

______5. A receptacle for feces or urine smaller than a regular bedpan that can be positioned with less movement for the patient

______6. A bed which has a patient in it; also a technique for making such a bed

______7. A receptacle for urine

______8. A bed with the top linens pulled up to keep clean all linens that will come into contact with the patient

g. Occupied bed
h. Open bed
i. Overbed table
j. Patient's unit
k. Siderails
l. Therapeutic
m. Unoccupied bed
n. Urinal
o. Waste receptacle

Part 4

______1. A condition where the brain receives an inadequate oxygen supply during sleep

______2. Believing that stimuli are present which are not

______3. Rapid eye movement sleep; the sleep where dreams occur

______4. Occurring at night

______5. A recurring 24 hour cycle

______6. A state resulting from lack of stimulation

a. Circadian rhythm
b. Enuresis
c. Hallucination
d. Illusion
e. Insomnia
f. Narcolepsy
g. Nocturnal
h. NREM sleep
i. REM sleep
j. Sensory overload
k. Sensory deprivation
l. Sleep deprivation
m. Sleep apnea
n. Somnambulism

OBJECTIVE 2 **Identify basic equipment found in the patient unit.** Find the items listed in the illustration below and write the corresponding letter in the blank.

______1. Bed rails

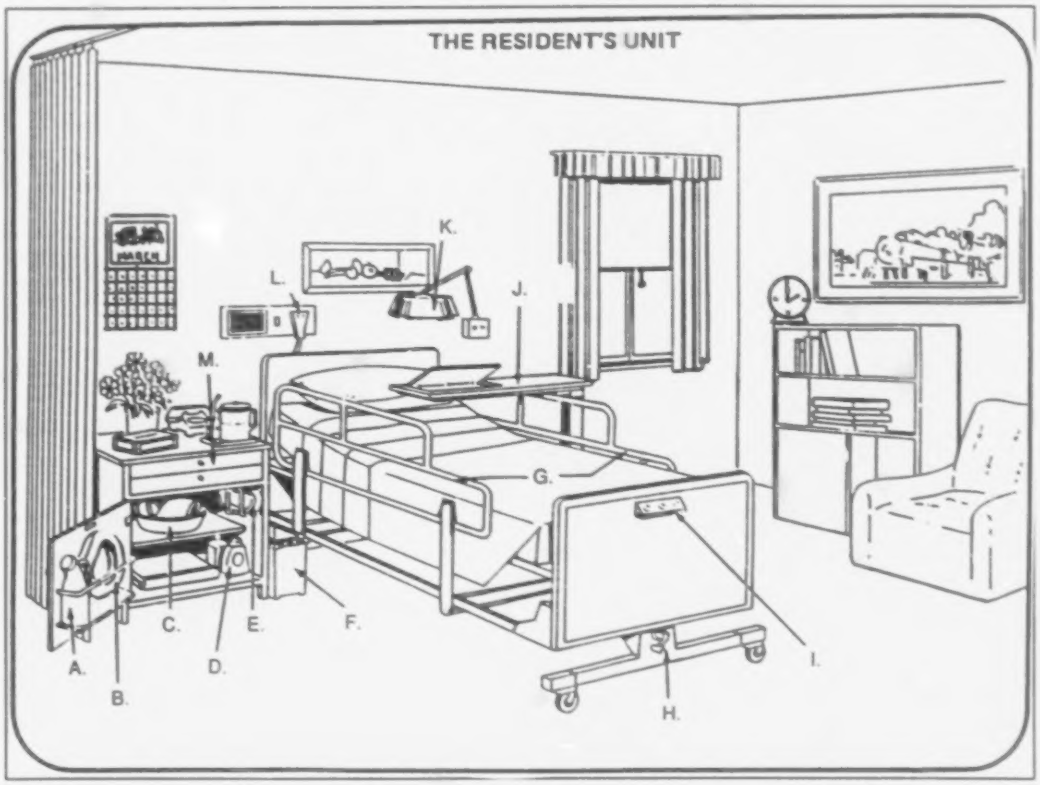
______2. Bedpan

______3. Gatch handle

______4. Urinal

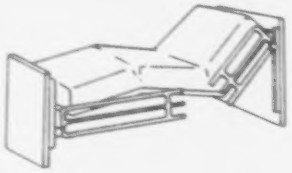
______5. Call signal

______6. Overbed table

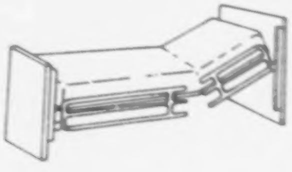

THE RESIDENT'S UNIT

Source: Connie A. Will/Judith B. Eighmy, *Being A Long-Term Care Nursing Assistant*, 2e, ©1988, p. 232. Reprinted by permission of Prentice-Hall, Englewood Cliffs, New Jersey.

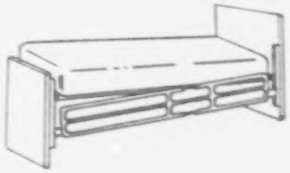
OBJECTIVE 3 **Label basic bed positions.**



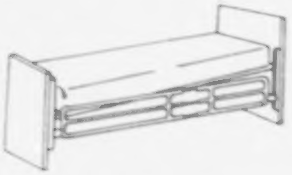
1. ____________________



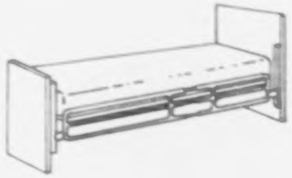
2. ____________________



3. ____________________



4. ____________________



5. ____________________

Source: Potter, Patricia A., and Perry, Anne G.: *Basic Nursing: Theory and Practice*, ed. 2, St. Louis, ©1991, Mosby-Year Book, Inc. Used with permission.

OBJECTIVE 4 **Choose the best word or phrase to complete statements about ways to control the environment for the patient's comfort and health.** Write the letter of the correct answer in the blank.

______1. The environmental factor that is not usually a concern of the nurse in the hospital, but may be in assisting a family in a home care situation is ___.

a. temperature
b. noise
c. humidity
d. privacy

______2. A patient has a number of newspapers, dying flowers, and greeting cards on the overbed and bedside table. The BEST nursing action would be to ___.

a. tell the patient they must all be thrown away
b. tell the family to take them home
c. leave them for the patient to enjoy
d. work with the patient to remove clutter

______3. The behavior of nurses in a patient area would most directly affect the environmental concern of ___.

a. noise
b. lighting
c. ventilation
d. temperature

______4. Since nurses are a part of the patient's environment, the action that would *NOT* show consideration for the patient would be to ___.

a. bathe regularly and use deodorant
b. wear a musk-scented cologne or after-shave
c. use breath mints after smoking or drinking coffee
d. avoid eating such foods as onions before caring for patients

______5. Most patients will be comfortable if the temperature is ___.

a. above 75 degrees
b. below 85 degrees
c. between 68 and 74 degrees
d. between 72 and 82 degrees

______6. The nursing action that would most directly affect the patient's safety is ___.

a. damp-dusting the patient's unit
b. answering ringing telephone promptly
c. providing extra blankets
d. providing indirect lighting

______7. Disorientation, illusions, and hallucinations could be symptoms of ___.

a. sensory deprivation
b. sensory overload
c. both
d. neither

______8. Nursing actions regarding temperature control include ___.

a. keeping the temperature lower for elderly patients
b. turning the temperature up during bathing
c. setting the thermostats to the same temperature for all rooms on the unit
d. putting two blankets on each patient

______9. A desirable humidity level is ___.

a. 20-30%
b. 30-40%
c. 40-50%
d. 50-60%

_____10. Good ventilation control is important because it prevents the spread of pathogens and because ___.

a. patients complain when air circulation is increased
b. open hospital windows allow too much smog into rooms
c. too much ventilation increases heating costs
d. uncirculated air becomes stale

_____11. The BEST nursing action for entering a patient's room at night is to ___.

a. turn on a nightlight
b. wake patients and warn them you are turning on the light
c. quietly enter the room and turn on the light
d. work quietly in the light from the hall

_____12. To keep the patient environment clean and safe, the nurse may have to ___.

a. have furniture rearranged in a home-care setting
b. throw out old greeting cards
c. empty trash containers every other day
d. remove used equipment and supplies daily

_____13. Pulling curtains between patients ___.

a. shows respect for the patient we are treating
b. implies that the other patient is a curious onlooker
c. protects us against lawsuits for invasion of privacy
d. prevents the patient from pathogenic organisms

_____14. Symptoms of sensory overload can include unexplained fatigue, disorientation, illusions, or hallucinations, and ___.

a. are considered a medical emergency
b. are only temporary and will disappear with time
c. are similar to the symptoms of sensory deprivation
d. will recur after the stimulus level is corrected

_____15. When one patient wants the television volume turned up and one wants the television turned off, the nurse should ___.

a. make a decision and stick to it
b. let the patients work it out between themselves
c. flip a coin
d. diplomatically settle the argument

OBJECTIVE 5 **Describe the two types of sleep.**

____

____

____

____

OBJECTIVE 6

Choose the best word or phrase to complete statements about factors that affect sleep patterns. Write the correct letter in the blank.

______1. Sleep research and observations of patients have shown that ___.

a. the need for sleep decreases with age
b. the need for sleep increases with age
c. the need for sleep stays about the same throughout the life span
d. age does not affect the need for sleep

______2. Sleeping medications which contain barbiturates ___.

a. depress NREM sleep
b. enhance REM sleep
c. depress REM sleep
d. have no effect on REM or NREM sleep

______3. Circadian rhythms help the nurse understand patients' general behavior and ___.

a. the amount of sleep a patient needs
b. the time of day a patient sleeps
c. peak times and down times for a variety of activities
d. all of the above

OBJECTIVE 7

Select factors that interfere with sleep and the nursing actions that can be used to overcome these factors. Write the correct letter in the blank.

______1. Nursing actions that may promote rest and sleep include all *the following EXCEPT* ___.

a. assist the patient to change positions
b. alter the environment, such as dimming lights
c. matter-of-factly refuse to listen to the patient's complaints
d. provide a snack such as warm milk

______2. Patients may be able to sleep better if they ___.

a. exercise just before bedtime
b. eat more chocolate
c. are advised to avoid pain medication near bedtime
d. are allowed to follow established bedtime routines

______3. The nurse should know that sleeping medications ___.

a. must be given in larger amounts to the elderly
b. affect many older people adversely
c. prevent people from feeling physically rested
d. deprive patients of Stage I sleep

______4. In order to help the patient get to sleep and remain asleep the nurse should ___.

a. adjust the thermostat to 65 degrees
b. leave room light on
c. answer telephones promptly
d. speak to the doctor about ordering a laxative

______5. A nursing action which may help greatly in providing rest is ___.

a. a backrub
b. making an anesthesia bed
c. shampooing the patient's hair
d. teaching the patient about medication side-effects

______6. When a patient complains of being hungry at night, the nurse may help the patient sleep by providing ___.

a. coffee
b. french fries
c. fresh fruit
d. milk

OBJECTIVE 8

Choose the best word or phrase to complete statements about conditions to observe during sleep. Write the correct letter in the blank.

______1. Observation of a patient's sleep ___.

a. is unnecessary
b. will disturb the patient's sleep
c. can help evaluate nursing measures
d. is an example of the analysis phase of the nursing process

______2. Enuresis occurs more frequently with ___.

a. adults
b. older adults
c. infants
d. children

______3. The person who suffers from somnambulism may be ___.

a. irritable and anxious
b. spending more time in NREM sleep
c. putting himself at risk
d. unable to sleep at night

______4. The group most often affected by sleep apnea is ___.

a. older women
b. young men
c. children
d. middle-aged men

______5. People suffering from sleep apnea often ___.

a. report feeling chronically tired
b. snore
c. both a and b
d. neither a or b

______6. Narcolepsy victims ___.

a. suffer from insomnia
b. have difficulty falling asleep
c. fall asleep suddenly at inappropriate times
d. have nocturnal sleeping habits

______7. Of the following statements about sleep disorders, the TRUE statement is ___.

a. sleep apnea is characterized by an increased pulse rate
b. enuresis occurs most frequently in the elderly
c. narcolepsy is exhibited by difficulty in falling asleep
d. somnambulism is often described as sleep-walking

OBJECTIVE 9

Discuss bedmaking. Answer the following questions.

1. In making an occupied bed

   a. Which piece of linen will be used first?

   ____

   b. Which piece of linen will come into contact with an area between the patient's shoulders and knees?

   ____

2. What are three advantages of making a bed correctly?

____

____

____

____

3. Describe four types of bedmaking.

____

____

____

____

____

____

____

____

4. For each of the following nursing actions, state whether it is safe or unsafe and why it is performed.

   a. Discarded a piece of linen which fell to the floor

   ____

   ____

   ____

   b. Shook linen removed from the bed to look for patient's belongings

   ____

   ____

   ____

   c. Avoided holding soiled linen next to the uniform

   ____

   ____

   ____

NOTICE The following job sheets are not part of the Written Test. If these activities have not been completed, check with your instructor.

OBJECTIVE 10 **Demonstrate the ability to**

a. **Prepare a patient unit.** RATING ______

b. **Make an unoccupied bed.** RATING ______

c. **Make an occupied bed.** RATING ______

WRITTEN TEST ANSWERS

PREPARE A PATIENT'S ENVIRONMENT

V

OBJECTIVE 1

Part 1

1. j
2. g
3. h
4. k
5. c
6. o
7. a
8. d
9. f
10. e

Part 2

1. g
2. f
3. a
4. c
5. m
6. j
7. h
8. b
9. d
10. i

Part 3

1. j
2. k
3. a
4. h
5. e
6. g
7. n
8. b

Part 4

1. m
2. c
3. i
4. g
5. a
6. l

OBJECTIVE 2

1. g
2. b
3. h
4. a
5. l
6. j

OBJECTIVE 3

1. Fowler's
2. Semi-Fowler's
3. Trendelenburg
4. Reverse Trendelenburg
5. Flat

OBJECTIVE 4

1. c
2. d
3. a
4. b
5. c
6. a
7. c
8. b
9. c
10. d
11. b
12. d
13. a
14. c
15. d

OBJECTIVE 5

Answers will vary by student but should include a brief discussion of the following key points.

- NREM (non-rapid eye movement) sleep is made up of the first 4 stages of sleep.
- NREM sleep plays a role in physiological restoration of the body.
- REM (rapid eye movement) sleep is the fifth stage or dreaming stage of sleep.
- REM sleep plays a role in psychological restoration.
- If the body is deprived of one kind of sleep, it will make up for it the next time sleep occurs.

OBJECTIVE 6

1. a
2. c
3. d

OBJECTIVE 7

1. c
2. d
3. b
4. c
5. a
6. d

OBJECTIVE 8

1. c
2. d
3. c
4. d
5. c
6. c
7. d

OBJECTIVE 9

1. a. mattress pad
   b. draw sheet

2. Answer may include any three of the following:

   - Saves time.

- Can make other procedures easier to accomplish, for example, moving the patient in bed and transferring the patient to a chair or stretcher.
- Is safer for the patient. Handling linens correctly will prevent the spread of pathogenic organisms.
- Is more comfortable for the patient. Wrinkles are uncomfortable. A smooth bed will also help prevent skin problems.
- Can protect the nurse. Making a bed correctly involves the use of good body mechanics which protects the nurse from injury.
- Makes the environment neater and more pleasant for the patient.

3. Answer may include any four of the following:
   - **Closed bed** — The top linens are pulled to the head of the bed with the sheets covered
   - **Open bed** — The top linens are pulled down so the bed is ready to receive the patient
   - **Occupied bed** — Changing the linens with the patient in the bed.
   - **Unoccupied bed** — Changing the linens when the patient is out of the bed.
   - **Post-op, anesthesia, or surgery bed** — The top linens are folded to the side of the bed to provide more space for positioning a patient in bed.

4. a. Safe. The floor can contaminate the linen with pathogens and could spread the pathogens to the patient.

   b. Unsafe. Shaking the linen can put dust and pathogens into the air.

   c. Safe. Clean linen can be contaminated by the uniform and contact with dirty linen can contaminate the uniform.

OBJECTIVE 10 Refer to Practical Tests for Job Sheets 1 through 3.

OBJECTIVE SHEET

COMPLETE DOCUMENTATION VI

INTRODUCTION

Documentation in the health care field serves as a means of communication to all health care workers who come into contact with the patient. It is the way one worker tells others about the patient's condition and the worker's action. The chart, where the documentation is entered, is a legal document which can be subpoenaed into a court of law. Both of these uses of documentation makes it vitally important that entries are clear, complete, and concise. Skillful documentation protects and serves both the nurse and the patient.

UNIT OBJECTIVE

After completing this unit the student should be able to document pertinent information correctly, using narrative notes, the problem-oriented medical record, or flow sheets. The student will demonstrate these competencies by completing assignment sheets and a written test with a minimum of 85 per cent accuracy.

SPECIFIC OBJECTIVES

After completing this unit the student will be able to:

1. Match terms associated with documentation to their correct definitions.
2. Select reasons for charting information.
3. Choose the best word or phrase to complete statements about the rules of charting.
4. Select from a list true statements about information which should be charted.
5. Distinguish among various styles of charting.
6. Match patient information to the chart form where it would be found.
7. Obtain information from various chart pages. (Assignment Sheet 1)
8. Document information on various chart pages. (Assignment Sheet 2)

9. Document information using a traditional medical record. (Assignment Sheet 3)

10. Document information using a problem-oriented medical record. (Assignment Sheet 4)

11. Document information using a flow sheet or checklist style of charting. (Assignment Sheet 5)

SUGGESTED ACTIVITIES

COMPLETE DOCUMENTATION VI

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- Obtain charting forms for students to use for practice.
- Invite a guest speaker to discuss the importance of documentation.

  NOTE: Please provide the guest speaker with the specific topic relevant to the unit of instruction ahead of time. Confirm the scheduled appearance 2-3 days prior to the presentation.
- Make a bulletin board showing charting forms.
- Devise games and/or crossword puzzles to reinforce terms or groupings.
- **HOSA** Integration
  - — Create a poster according to extemporaneous Health Display rules. Display in highly visible areas.

DELIVERY

- Discuss unit objectives.

Objective 1

- Discuss terms dealing with documentation.
- Add any other terms pertinent to documentation in your facility.

Objective 2

- Discuss reasons for charting information.
- Share with students stories and examples of how good documentation and poor documentation can affect patient health and administrative operations.
- Have students draw analogies between charting and other types of record keeping they are familiar with.

Objective 3

- Discuss rules of charting.
- Have students complete Activity Sheet 1.
- Collect misspelled words from students' papers and turn these into a spelling list for a quiz.
- Have a spelling bee using words frequently found in charting.

Objective 4

- Discuss information which should be charted.
- Have students complete Activity Sheet 2.
- Develop good and bad examples of charting for the students to evaluate. Have them tell why the bad examples are bad.
- Have students work on computer program, *Documentation - Doing the "Write" Thing.*

Objective 5

- Discuss various styles of charting.
- Develop several scenarios common to patient care situations that the students will see. Have them practice charting the pertinent information in whatever form they will be required to use. It may be useful to have them work in groups at first and then evaluate the results as a class.

Objective 6

- Discuss the purposes of various charting forms.
- Provide students with examples of forms they will be seeing in clinical practice.

APPLICATION

Objectives 7 through 11

- Obtain forms from local facilities for student practice.
- Discuss Assignment Sheets 1 through 5.
- Have students complete Assignment Sheets 1 through 5.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.
- Reteach and retest if necessary.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Computer Software

- *Documentation - Doing the "Write Thing."* Computerized Educational Systems, 307 Park Lake Circle, P.O. Box 536905, Orlando, FL 32853-6905.

Publications

- Bergerson, Stephen R. "Charting with a Jury in Mind." *Nursing 88*, April, 1988, pp. 51-56.
- Brill, Esther Levine and Dawn F. Kilts. *Foundations for Nursing* (2nd ed). Appleton-Century Crofts, Norwalk, Connecticut, 1986.
- Jones, Naomi. *Guidelines for Charting.* Moore-Norman Area Vocational Technical School, Norman, Oklahoma, 1984.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures* (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice.* The C.V. Mosby Company, St. Louis, Missouri, 1987.
- Sundberg, Mary C. *Fundamentals of Nursing.* Jones and Bartlett Publisher, Inc., Boston/Monterey, 1986.

UNIT REFERENCES

- Bergerson, Stephen R. "Charting with a Jury in Mind." *Nursing 88*, April, 1988, pp. 51-56.
- Brill, Esther Levine and Dawn F. Kilts. *Foundations for Nursing* (2nd ed). Appleton-Century Crofts, Norwalk, Connecticut, 1986.
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- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C.V. Mosby Company, St. Louis, Missouri, 1987.
- Sundberg, Mary C. *Fundamentals of Nursing*. Jones and Bartlett Publisher, Inc., Boston/Monterey, 1986.

INFORMATION SHEET

COMPLETE DOCUMENTATION VI

OBJECTIVE 1

Match terms associated with documentation to their correct definitions.

- **Admission sheet** — A chart document giving biographical and statistical information about the patient; may also be called face sheet
- **Audit** — To compare to a standard
- **Change of shift report** — A means of passing information from one shift to another
- **Chart** — All documents containing information about a single patient gathered together; also called the patient's record
- **Confidential** — Information not to be shared; secure
- **Consent** — To give permission
- **Data base** — One of the components of SOAP or problem-oriented records
- **Doctor's order sheet** — The page of the chart reserved specifically for the physician to write the orders directing the care given the patient
- **Documentation** — Recording information; also called recording or charting
- **Flow sheet** — A chart document designed to record routine assessments. The graphic record is a type of flow sheet
- **Graphic sheet** — A type of flow sheet for recording numerical information such as temperature, pulse, respiration, blood pressure or intake and output
- **Initial plan** — A component of SOAP or problem-oriented records in which the treatment plan is developed
- **JCAHO** — Joint Commission on Accreditation of Healthcare Organizations, a body which surveys hospitals and grants accreditation based on meeting set standards

- **Kardex-type or Nursing Kardex-type form** — A large file/card-like document designed for summarizing current nursing care required for a single patient

- **Medication administration record (MAR)** — A chart document for recording medications administered

- **Military time** — The 24-hour clock with time designated as 0001 through 2400 hours

- **Narrative** — Charting style where a complete, although brief, account of an event or action is written out

- **Nurse's notes** — A component of the traditional chart for nurses to record information obtained in patient care

- **Problem-oriented record (POR) or problem-oriented medical record (POMR)** — A style of charting using a specified format for recording information; also called SOAP charting

- **Problem list** — A component of SOAP or problem-oriented records that lists all conditions identified by the data base

- **Progress notes** — A component of the chart for physicians and other health care professionals to record information about a patient

- **Quality assurance** — To assure safety and accuracy

- **SOAP charting** — A charting style using a specified format for recording information; also called a problem-oriented record

OBJECTIVE 2 **Select reasons for charting information.**

- **Communication** — The major purpose of documentation is communication. All materials pertaining to one patient are gathered together so that everyone involved in his care may have access to the same information. This includes input from all physicians seeing the patient, nurses caring for the patient, the laboratory and radiology departments, physical therapist, respiratory therapist, social workers, dieticians, and any others involved in performing services for and giving care to the patient. The chart allows all parties to be informed about what is being done and how the patient is responding.

- **The chart is a legal document** — It is essential that all information be accurate and understandable because it could someday be used to protect the nurse or some other health care worker, and it could also be used to protect the patient in proceedings such as child care custody litigation.

- **The chart has value as an educational tool.** Students in any health care field can learn about the progress of a specific illness and monitor the necessary care. Practical nursing students should not overlook the value of the chart as a way of learning about a condition they may not be able to care for first-hand, but may still watch through the eyes of others in the chart. Keep in mind that your documentation provides a teaching resource for others.

- **Patients' charts may be used as research tools.** A researcher investigating the effects of a medication, for instance, can gain information by looking at the charts of a number of patients receiving this medication.

- **Charts are used in a hospital's quality assurance program to determine if adequate care is being provided.** This involves auditing or examining the charts to see exactly what is being done. This procedure could raise questions about what is actually being done for the patient if all care given is not documented. The auditing process may be a part of the hospital's procedure to receive accreditation by JCAHO (the Joint Commission on Accreditation of Healthcare Organizations.)

- **The patient's financial reimbursement may also depend on accurate charting.** Insurance companies may want proof that a piece of equipment was used and the chart can provide that proof.

For each case we've discussed here, someone could be hurt or erroneous conclusions could be drawn if information is not clear, complete, and concise.

OBJECTIVE 3 **Choose the best word or phrase to complete statements about the rules of charting.**

While there are several different styles or formats in use for documentation, there are some basic rules that must be followed, regardless of the style.

- **Information in the chart is confidential**. It is there for use by health care workers and not for gossip material. Nurses should be careful about when and where they discuss information they have obtained in caring for patients. Charts are used as educational tools, but not to gain information to spread about the patient.

- **The material must be legible.** If no one else can read the information, it is of no use. Entries may be printed or written in cursive style, but they must be legible.

- **Spelling must be accurate.** Poor spelling means that information can be easily misunderstood. Accurate spelling is a part of documentation.

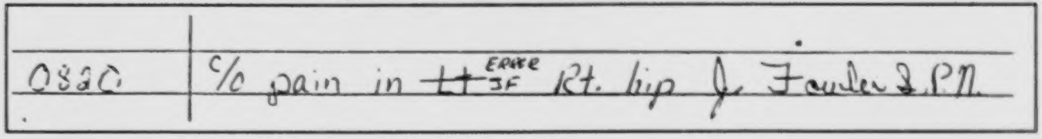
- **Abbreviations must be used appropriately.** Abbreviations can save time, but unless they are easily recognized by the people reading them, they serve no useful purpose. Most health care agencies have lists of abbreviations accepted in that facility. The nurse should be aware of what is accepted and understood. Abbreviations do not have to be used. One of the basic rules of charting is that the entry be clear. If the entry would be more easily understood without abbreviations, omit them.

- **All entries into the patient's chart must be made in ink.** The chart is intended to be a permanent record which cannot be altered. Black ball-point pens are the writing instruments required by most agencies. Black ink lends itself to photocopying and micro-filming, which is frequently used today.

- **Corrections must follow specific guidelines.** Since errors sometimes do occur, the nurse must know the right way to correct them. A single line is drawn through the mistake so that the words originally written are still visible. Agencies may have specific guidelines on correcting an error, but usually the word "error" is written above the lined out word along with the initials of the nurse. Then the part of the entry in error is rewritten correctly.

EXAMPLE:

Figure 1 Nurse's Notes



0830 c/o pain in ~~Lt~~ Error JF Rt. hip J. Fowler SPN.

Original pages of charting should not be destroyed. If errors made are extensive enough that it is difficult to interpret information, it may be necessary to recopy the original material on a clean chart page. The word "recopied" is written across the original and it is kept as a part of the chart. Graphic sheets are probably the most often recopied.

- **Never chart for someone else and do not ask others to chart for you.** Nurses are held responsible for having done or observed what is being recorded unless it is clearly documented that they observed another perform the action indicated.

- **Always chart after an action was performed, not before.** It is sometimes tempting to chart that a dressing was changed and then actually go change it, but something might happen to prevent you from carrying out the action. Documentation should take place immediately after an observation is made or an act performed. Waiting may make it difficult for the nurse to remember exactly what occurred.

- **Do not use ditto marks in charting.**

- **Verify that an entry is being made on the right chart, on the right date, and for the correct time.** The patient's name should be entered on each page of the chart before any entries are made. Dates may be entered at the top of some charting documents or at the time of charting on some others. Make sure that all entries are dated. Times can be critical in a health care setting. Times of entries should be clearly indicated.

- **Each entry must be followed by the signature of the person making the notation.** Most agencies require that entries be signed with the first initial, last name, and title. The student practical nurse Judy Fowler would sign the entry, J. Fowler, SPN.

- **Do not leave blank spaces or lines in a chart.** Lines should be drawn to the end of any line on the chart not used completely. Anything above the signature is considered to be documented by that person. There should be no opportunity for anyone else to make any additions to another's entry.

  Clearly indicate that a late entry is being made when it is necessary. If another entry has been made before a nurse has had an opportunity to document an intervention, the entry is completed on the next available space. It is labeled as a late entry and the time of the intervention is documented as the time of the entry. In this manner, the entry is not squeezed in and it is not omitted, but the chronological order is still recognizable.

  It may even be necessary to make a late entry at a later date, if a nurse remembers pertinent data that has not been documented. Agencies may differ in the exact procedure because of the documents used for charting, but it is important to remember that it is again clearly labeled as a late entry with the date and time of the original observation indicated.

- **Keep notes concise.** Since charting is to be concise, words such as *a, an, the, was,* and similar words are omitted. A compete thought is always included, but not a complete sentence as it would appear in a book or newspaper. If we wish to communicate that the patient is walking in the hallway, we could say simply, "Walking in hallway".

- **The patient is the subject of every entry unless we specify otherwise.** Therefore we can make statements like, "Complains of abdominal pain" or "Lying quietly in bed" and everyone knows we are referring to the patient. If we want to talk about the catheter we removed, we must include the catheter as the subject such as "Foley catheter removed". If we turn the words around and say "Removed Foley catheter", that communicates that the patient removed the catheter.

- **Use quotation marks to identify direct statements made by the patient.** Sometimes patients may phrase complaints quite uniquely, so that their exact words add to the understanding of the situation. If we write *Complains of tingling sensation in lower extremities* without using quotation marks, it is understood that it is the nurse's observation. But if we use the patient's own statement, we enclose it in quotes: *Complains of "a million little bugs crawling over my legs"*, and we have a more descriptive statement.

- **Avoid words such as "good" or "normal."** Describe the exact observation. Rather than saying *circulation is good* something like *Skin pink with rapid capillary refill* is more descriptive. Phrases like *appears to be* or *seems to be* are not helpful. State the exact observation.

  "Confusion" is another vague term. Describe the patient's behavior. The entry *States she must get up to milk the cows*, tells us more than saying the patient is confused.

- **Know the agency policy regarding ownership of charts.** The patient's chart is usually considered the property of the hospital, nursing home or other health care agency. In an office or clinic setting, it is considered to be the property of the doctor. Different agencies have different policies about allowing the patient access to his chart. It is wise to know the policy of the agency where the nurse is practicing.

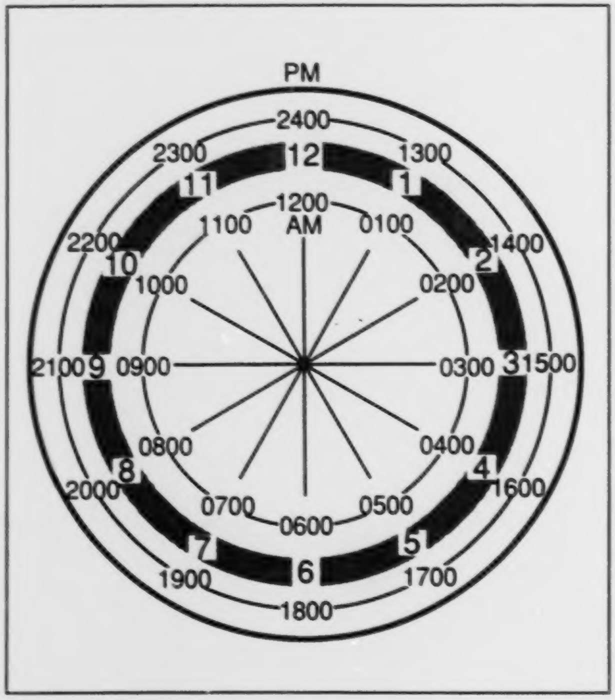
- **Use military time for documentation.** Military time, or the twenty-four hour time clock, is used in many health care facilities. Using this format, the hours of the clock begin at 0001 which would be one minute after midnight and continue to 2400 hours, which is midnight. If an entry is made at 25 minutes after midnight, the time would be recorded as 0025.

  1:00 a.m. is 0100 hours
  6:35 a.m. is 0635 hours
  10:15 a.m. is 1015 hours

  Noon is 1200 hours and 1:00 p.m. becomes 1300 hours. It is easy to determine time after noon by adding the number of hours past noon to 12. Thus 4:00 p.m. is 1600 hours (12 + 4) and 9:00 p.m. is 2100 hours (12 + 9). 3:20 p.m. is 1520 and 6:45 p.m. is 1845.

The advantage of using military time is that is avoids the mistakes or uncertainty which a poorly written A or P could cause. It may take a short time to learn, but once learned, it is easy to use.

Figure 2 Military Time*


PM
2400
2300
12
1300
11
1
1200
AM
1100
0100
2200
1400
10
2
1000
0200
2100
9
0900
0300
3
1500
0800
0400
8
4
2000
1600
0700
0600
0500
7
5
1900
6
1700
1800

OBJECTIVE 4

Select from a list true statements about information which should be charted.

Each health care agency will have guidelines about what should be charted and how it should be done. Generally though, there will be some provision made for charting the following information.

- Vital signs
- Completion of personal hygiene
- Dietary intake
- Record of fluid intake and output
- Bowel elimination
- Doctor's visits

*From *Fundamentals of Nursing*, Third Edition, by Kozier and Erb (Menlo Prk, CA: Addison-Wesley Publishing Company, 1987). Reprinted by permission.

- All medications given
- Assessment of patient's condition at regular, stated intervals (Usually at the beginning of each shift)
- Any specific, frequent assessments such as neurovascular or neurological assessments
- Admission of patient
- Discharge of patient
- Any time the patient leaves the unit or returns
- Any interventions indicated by doctor's order or nursing orders, including:

  — Specifically what was done
  — Information such as name and amounts of solutions, sizes of tubes or needles
  — Any results, returns, or observations described in detail
  — Any instructions given to the patient
  — The reaction or tolerance of the patient

  EXAMPLES:
  — Enemas
  — Catheterization (inserting and discontinuing
  — IV therapy (inserting and discontinuing)
  — Dressings (application and removal)
  — Collection of specimens
  — Suctioning
  — Nasogastric tube therapy (insertion, removal, instillation of feedings)
  — Irrigations (colostomy, vaginal, etc.)
  — Ambulation
  — Turning
  — Range of motion exercises
  — Heat and cold therapies (application and removal)
  — Weight
  — Application and removal of any safety or protective device
  — Patient teaching

- Any change in patient's physical or mental condition including:

  — The specific observation
  — What was done
  — Who was notified
  — Any action taken as a result of the notification

- Any complaints or concerns of the patient and action taken

OBJECTIVE 5

Distinguish among various styles of charting.

There are three standard types of charting. The traditional method uses a narrative style of writing. The SOAP, SOAPIE or SOAPIER method, is a problem-oriented approach and uses the letters to represent each step in the documentation process. And the check list style is a fast method with minimal writing that documents the patient's care on pre-printed forms. It is important to be able to work with all three styles because agencies require a specific style to be used in all areas of patient care.

Traditional Charting

The traditional, or narrative style, of charting requires the nurse to enter in written form, on the nurses notes, the information about the patient. Events are recorded in chronological order. The time period between charting entries would be very short in an ICU setting, but would be farther apart in a less acute area. Policies might dictate that an entry be made once a shift, every two hours, or at some other interval.

The exact material expected to be documented varies with the agency. Generally, we would find assessments of the patient's condition at the beginning of the shift and as warranted thereafter. Any complaint of the patient should be documented, as well as any changes in the patient's condition. The nurse would also record what action was taken in relation to the complaints or changes, including the names and actions of persons notified.

Any procedures performed are recorded, along with the patient's response. In some agencies this would include notations such as that the bath was given and the bed was changed. Other agencies would consider this routine information and might provide a check list to record it. Times of leaving and returning should be documented if the patient must leave the nursing unit for any care or treatment. Visits by family members or others, as specified by agency policy, and the patient's response might be included.

Entries on the nurses notes are preceded by a notation of the time the note was recorded and followed by the signature of the nurse. Blank lines should not appear between entries or between the entry and the nurse's signature.

The caution to be clear, complete, and concise is extremely important in narrative style charting. All pertinent information should be recorded in a manner that is easily understood, reports all required data, and without an excess of words that might cloud the message.

SOAP Charting

SOAP charting or the problem-oriented medical record divides the patient's record into areas based upon the type of information to be recorded, rather than the health care professional recording the information. Nurses, doctors, physical therapists, social workers and others all use the same forms for recording information. In a true SOAP chart, four types of records are found.

Data Base — This is the area where all assessment data is gathered. Physical assessment, interview and diagnostic assessment is all included.

Problem List — A list of problems is derived from the assessment data. Each problem is assigned a number. In further charting, the problem is listed by number. The number does not refer to the importance of the problem, but rather the order in which the problem was recognized. Some of the problems may be true nursing diagnoses, but since all types of health care workers formulate and use the list, others will not be. It is expected that some problems will be solved and others will be added during the course of treatment.

Initial Plan — Each problem will have a plan of care. Some problems can be handled by nursing orders alone and others will require doctor's orders for such things are further diagnostic studies, medication, diet and specific treatments.

Progress Notes — All health care professionals caring for the patient record their interventions and observations on the progress notes. The information is recorded in a specific format. The institution chooses between different format lengths described as SOAP, SOAPIE or SOAPIER.

The SOAP format requires that a distinction be made between subjective and objective data. Many physicians, physical therapists, social workers, dieticians, and other health care professionals use this format on the progress sheet of the traditional chart.

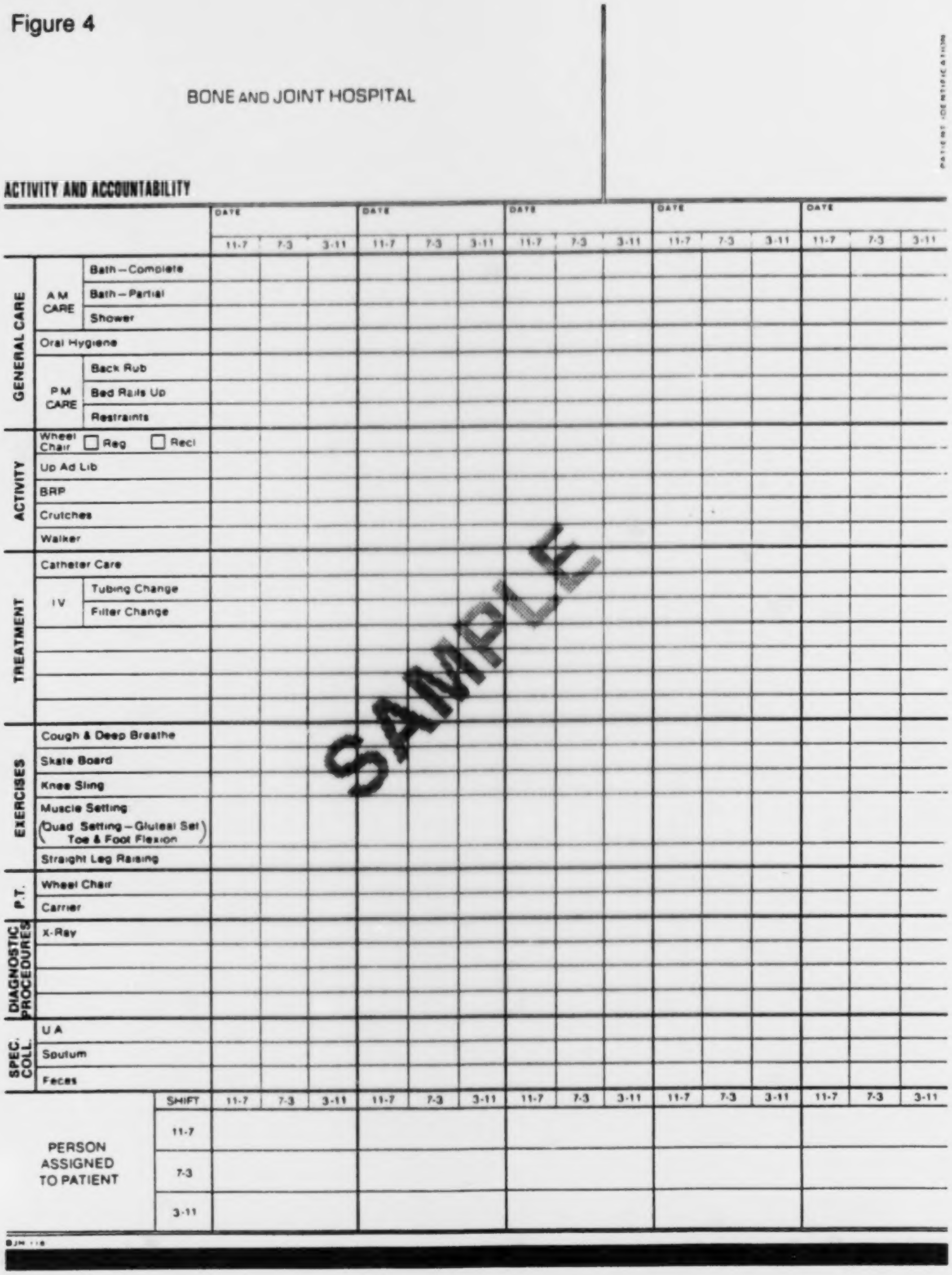
S	O	A	P	I	E	R
Subjective data	**Objective data**	**Assessment data**	**Plan for care**	**Interventions implemented**	**Evaluation of plan**	**Revision of plan**
Information from patient	Data collected by nurse	Analysis of data	Treatment to restore health	Activities that were implemented	Effectiveness of treatment	Planned changes to improve effectiveness
"I haven't had a bowel movement in two days."	• No stool recorded • Eating very little • Spending most of time in bed	Constipation	• Encourage eating • Provide increased fluid intake • Encourage activity	• Assisted with meal to encourage to eat • Prune juice provided • Assisted to walk length of hall twice	Small amount hard stool defecated with difficulty	• Continue to encourage activity • Provide juice at regular intervals • Speak to dietician about fiber in diet

Flow sheet

Flow sheets are used by many agencies as a part of nursing documentation. They remind the nurse what should be observed and recorded and they shorten the time required for documentation. Check lists may take the place of narrative style initial assessments. They may be used for recording routine care such as bathing, meals, and monitoring IV's. Each agency will have policies concerning their use and any additional documentation.

See the examples on the next two pages.

Figure 4



BONE AND JOINT HOSPITAL

PATIENT IDENTIFICATION

ACTIVITY AND ACCOUNTABILITY

SAMPLE

			DATE			DATE			DATE			DATE			DATE		
			11-7	7-3	3-11	11-7	7-3	3-11	11-7	7-3	3-11	11-7	7-3	3-11	11-7	7-3	3-11
GENERAL CARE	A M CARE	Bath—Complete															
		Bath—Partial															
		Shower															
	Oral Hygiene																
	P M CARE	Back Rub															
		Bed Rails Up															
		Restraints															
ACTIVITY	Wheel Chair ☐ Reg ☐ Recl																
	Up Ad Lib																
	BRP																
	Crutches																
	Walker																
TREATMENT	Catheter Care																
	I V	Tubing Change															
		Filter Change															
EXERCISES	Cough & Deep Breathe																
	Skate Board																
	Knee Sling																
	Muscle Setting																
	(Quad Setting—Gluteal Set Toe & Foot Flexion)																
	Straight Leg Raising																
P.T.	Wheel Chair																
	Carrier																
DIAGNOSTIC PROCEDURES	X-Ray																
SPEC. COLL.	U A																
	Sputum																
	Feces																

	SHIFT	11-7	7-3	3-11	11-7	7-3	3-11	11-7	7-3	3-11	11-7	7-3	3-11	11-7	7-3	3-11
PERSON ASSIGNED TO PATIENT	11-7															
	7-3															
	3-11															

BJH 118

Used with permission of The Bone and Joint Hospital, Oklahoma City, Oklahoma.

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Figure 5

DATE					
H.D./P.O. DAY					
HOUR		AM 12 4 8 PM 12 4 8	AM 12 4 8 PM 12 4 8	AM 12 4 8 PM 12 4 8	AM 12 4 8 PM 12 4 8
TEMPERATURE GRAPHIC	°C °F				
	40 -104				
	39.4-103				
	38.8-102				
	38.3-101				
	37.7-100				
	37.2- 99				
	36.6- 98				
	36.1-97				
Pulse					
Respiration					
Blood Pressure					
Diet					
%Taken Other	NPO	B: L: D:	B: L: D:	B: L: D:	B: L: D:
SPECIAL PROCEDURES	A.M. Care				
	P.M. Care				
	Siderails	11-7	11-7	11-7	11-7
	Activitives				
	Snack				
		7-3	7-3	7-3	7-3
	Siderails				
	Activitives				
	Snack				
		3-11	3-11	3-11	3-11
	Siderails				
	Activitives				
	Snack				
INTAKE		Oral IV Blood	Oral IV Blood	Oral IV Blood	Oral IV Blood
	10PM-6AM				
	6AM-2PM				
	2PM-10PM				
	TOTALS				
OUTPUT		Urine Stool Gastric	Urine Stool Gastric	Urine Stool Gastric	Urine Stool Gastric
	10PM-6AM				
	6AM-2PM				
	2PM-10PM				
	TOTALS				
DOCTORS VISIT					
NURSE SIGN	11-7				
	7-3				
	3-11				

SAMPLE

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OBJECTIVE 6

Match patient information to the chart form where it would be found.

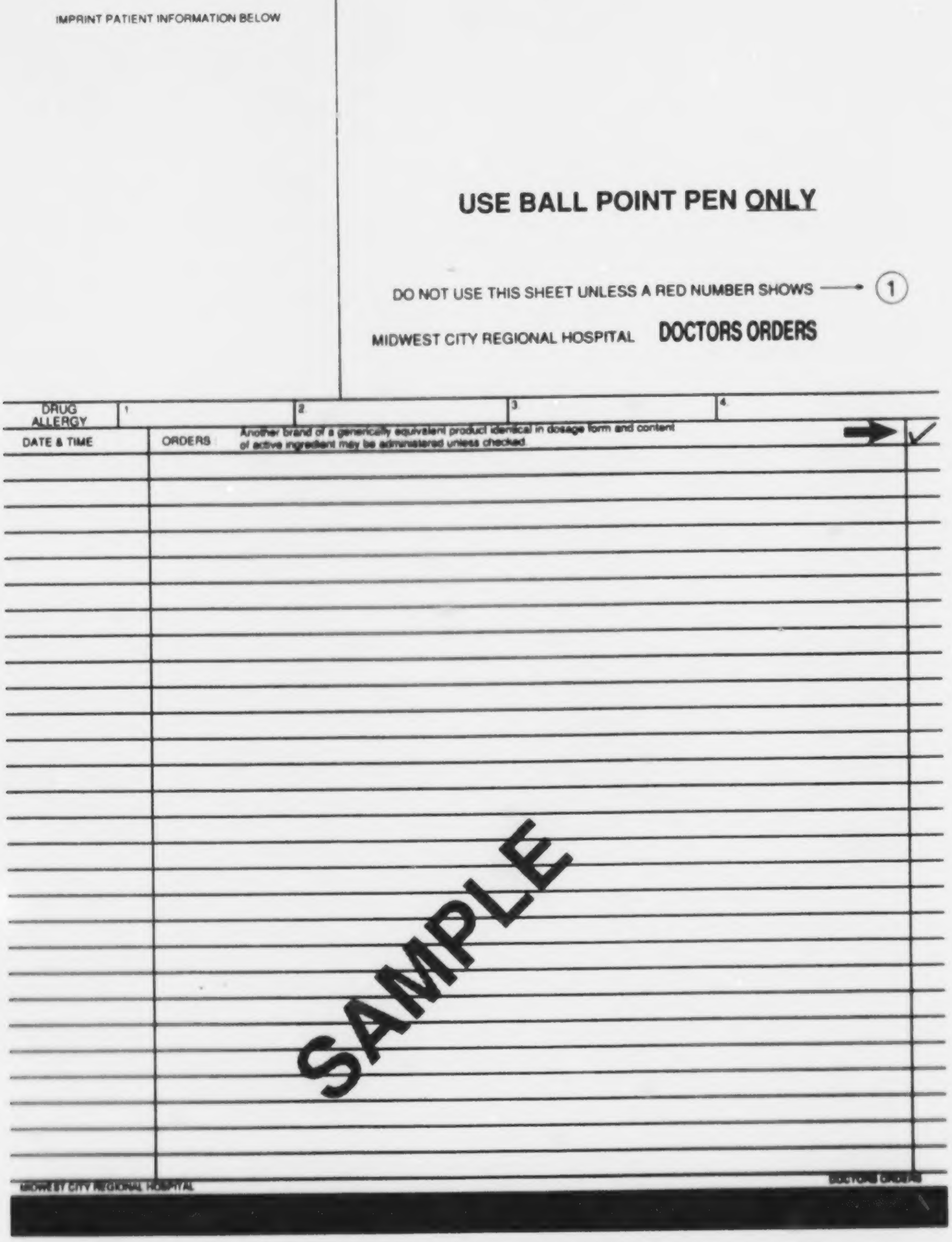
Types of Charting Materials

In the traditional chart, various documents are restricted to use by certain individuals or groups. One way of describing the restriction is *classification of material by source.* Nurses are the source of information of the nurse's notes, physicians are the sources of information on the doctor's order sheet, etc. Each institution will have it's own variations, but many of the documents will be similar.

- **The admission sheet, face sheet, or front sheet** — Supplies patient data such as address, place of employment, next of kin, emergency phone numbers, and insurance carrier. There is usually a place for the doctor to record an admitting diagnosis and any secondary diagnoses, for pre-existing conditions or those developed in the hospital. When the patient is discharged and the chart goes to the medical records department, this becomes the cover sheet.

- **The doctor's order sheet** — Restricted to directions for the patient care issued by the physician. The sheet is usually lined and practically blank except for information identifying the institution. Many contain areas for the patient's allergies so the doctor is aware of these as orders are written. The patient's name and other identifying information is entered at the top of the page. The doctor then writes the orders to be carried out. Sometimes the doctor will communicate orders to nurses verbally or over the telephone. Then the nurse enters the orders on the order sheet followed by V.O. (to indicate a verbal order) or T.O. (to indicate a telephone order), followed by the doctor's name and the nurse's signature. If Dr. Jones gave a verbal order to Sue Glover, an R.N., it would look like the entry on the next page.

Figure 6



IMPRINT PATIENT INFORMATION BELOW

USE BALL POINT PEN ONLY

DO NOT USE THIS SHEET UNLESS A RED NUMBER SHOWS → ①

MIDWEST CITY REGIONAL HOSPITAL **DOCTORS ORDERS**

DRUG ALLERGY	1	2	3	4

DATE & TIME	ORDERS Another brand of a generically equivalent product identical in dosage form and content of active ingredient may be administered unless checked →	✓

SAMPLE

MIDWEST CITY REGIONAL HOSPITAL DOCTORS ORDERS

Used with permission of Midwest City Regional Hospital, Midwest City, Oklahoma.

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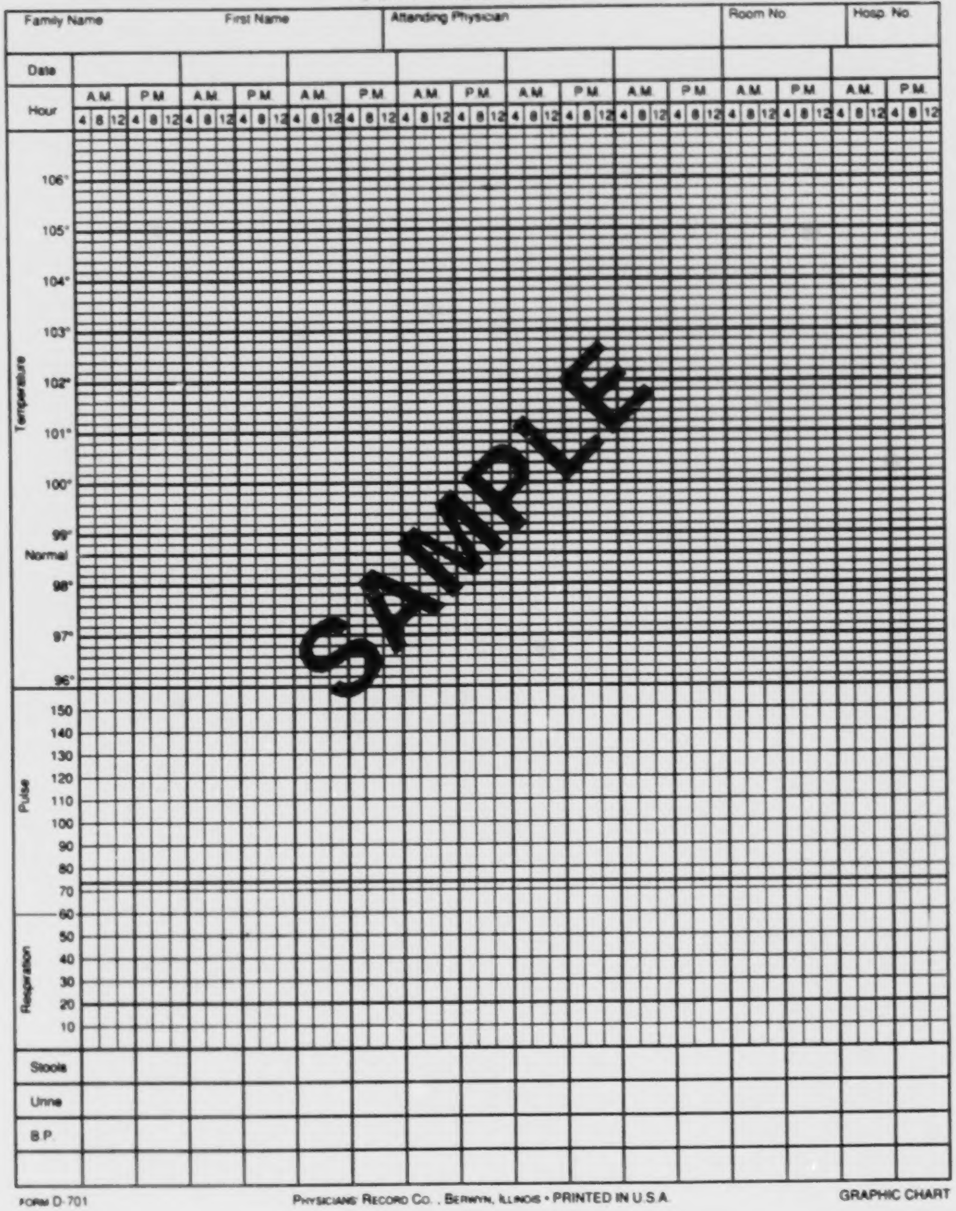
- **A history and physical sheet** — Records the doctor's admission assessment and interview with the patient. It is very likely that it will be a computer-generated or typed document in most agencies. Valuable information for the nursing data base will be found here.

- **The progress sheet** — Supplies an area for the physician and other health care professionals to outline the treatment given and the patient's reactions. Information from dieticians, physical therapists, social workers, and others dealing with the patient can be found here. In the traditional chart the nurse does not record observations here.

- **The graphic sheet** — Provides a record of temperature, pulse, respiration, and blood pressure. Some or all of this information may be recorded on a graph, giving the sheet its name. Some institutions may include other information such as weight, intake and output records, or other reoccurring data on the graphic sheet.

Figure 7

GRAPHIC CHART
8 DAY–4 HOUR–4•8•12



Family Name First Name

Attending Physician

Room No.

Hosp. No.

Date

Hour

A.M. P.M. (repeated for 8 days)

4 8 12 4 8 12 (repeated for 8 days)

Temperature: 106° 105° 104° 103° 102° 101° 100° 99° Normal 98° 97° 96°

Pulse: 150 140 130 120 110 100 90 80 70

Respiration: 60 50 40 30 20 10

Stools

Urine

B.P.

FORM D-701

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS • PRINTED IN U.S.A.

GRAPHIC CHART

SAMPLE

Used with permission of Physician's Record Company, Berwyn, Illinois.

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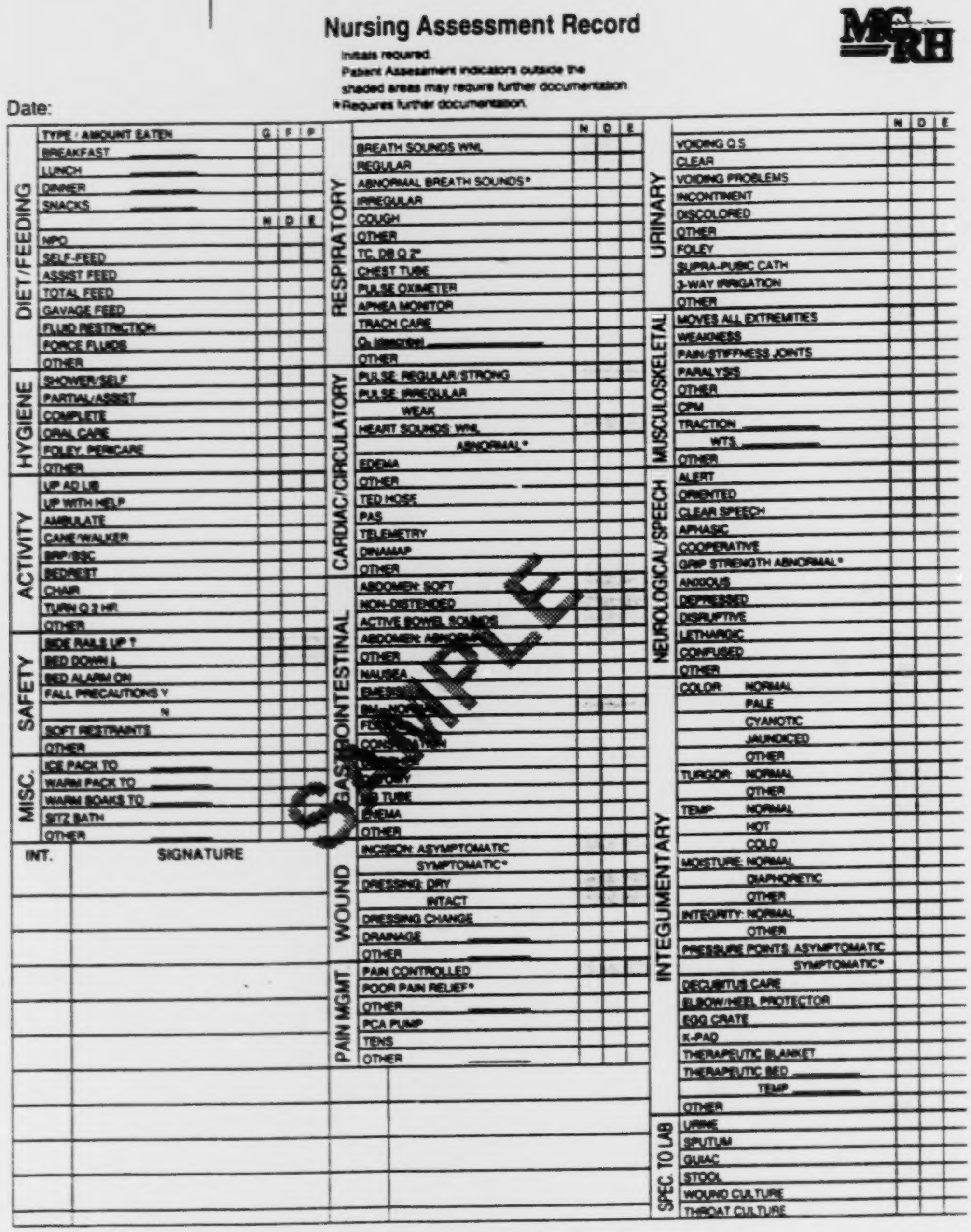
- **Medication administration record or MAR** — Reserved for nurses to record the names, amounts, and times of medications given. The medication sheets may be kept at the medication cart until a sheet is complete and then placed in the chart.

- **The nurses notes** — Reserved for nurses to enter information obtained in caring for patients. They may be blank pages, a flow sheet arrangement, or a combination of the two formats. In most agencies, licensed personnel are allowed to enter data on nurses notes. Some agencies may permit nursing assistants to chart also.

Figure 8



Nursing Assessment Record

MCRH

Initials required.
Patient Assessment indicators outside the shaded areas may require further documentation
* Requires further documentation.

Date:

		G	F	P
DIET/FEEDING	TYPE / AMOUNT EATEN			
	BREAKFAST ____			
	LUNCH ____			
	DINNER ____			
	SNACKS ____			
		N	D	E
	NPO			
	SELF-FEED			
	ASSIST FEED			
	TOTAL FEED			
	GAVAGE FEED			
	FLUID RESTRICTION			
	FORCE FLUIDS			
	OTHER			
HYGIENE	SHOWER/SELF			
	PARTIAL/ASSIST			
	COMPLETE			
	ORAL CARE			
	FOLEY, PERICARE			
	OTHER			
ACTIVITY	UP AD LIB			
	UP WITH HELP			
	AMBULATE			
	CANE/WALKER			
	BRP/BSC			
	BEDREST			
	CHAIR			
	TURN Q 2 HR			
	OTHER			
SAFETY	SIDE RAILS UP ↑			
	BED DOWN ↓			
	BED ALARM ON			
	FALL PRECAUTIONS Y			
	N			
	SOFT RESTRAINTS			
	OTHER			
MISC.	ICE PACK TO ____			
	WARM PACK TO ____			
	WARM SOAKS TO ____			
	SITZ BATH			
	OTHER ____			

INT.	SIGNATURE

		N	D	E
RESPIRATORY	BREATH SOUNDS WNL			
	REGULAR			
	ABNORMAL BREATH SOUNDS*			
	IRREGULAR			
	COUGH			
	OTHER			
	TC, DB Q 2°			
	CHEST TUBE			
	PULSE OXIMETER			
	APNEA MONITOR			
	TRACH CARE			
	O_2 (describe) ____			
	OTHER			
CARDIAC/CIRCULATORY	PULSE: REGULAR/STRONG			
	PULSE: IRREGULAR			
	WEAK			
	HEART SOUNDS: WNL			
	ABNORMAL*			
	EDEMA			
	OTHER ____			
	TED HOSE			
	PAS			
	TELEMETRY			
	DINAMAP			
	OTHER			
GASTROINTESTINAL	ABDOMEN: SOFT			
	NON-DISTENDED			
	ACTIVE BOWEL SOUNDS			
	ABDOMEN: ABNORMAL			
	OTHER			
	NAUSEA			
	EMESIS			
	BM - NO[illegible]			
	FO[illegible]			
	CONSTIPATION			
	[illegible]			
	[illegible]Y			
	NG TUBE			
	ENEMA			
	OTHER			
WOUND	INCISION: ASYMPTOMATIC			
	SYMPTOMATIC*			
	DRESSING: DRY			
	INTACT			
	DRESSING CHANGE			
	DRAINAGE ____			
	OTHER ____			
PAIN MGMT	PAIN CONTROLLED			
	POOR PAIN RELIEF*			
	OTHER ____			
	PCA PUMP			
	TENS			
	OTHER ____			

		N	D	E
URINARY	VOIDING Q S			
	CLEAR			
	VOIDING PROBLEMS			
	INCONTINENT			
	DISCOLORED			
	OTHER			
	FOLEY			
	SUPRA-PUBIC CATH			
	3-WAY IRRIGATION			
	OTHER			
MUSCULOSKELETAL	MOVES ALL EXTREMITIES			
	WEAKNESS			
	PAIN/STIFFNESS JOINTS			
	PARALYSIS			
	OTHER			
	CPM			
	TRACTION ____			
	WTS. ____			
	OTHER			
NEUROLOGICAL/SPEECH	ALERT			
	ORIENTED			
	CLEAR SPEECH			
	APHASIC			
	COOPERATIVE			
	GRIP STRENGTH ABNORMAL*			
	ANXIOUS			
	DEPRESSED			
	DISRUPTIVE			
	LETHARGIC			
	CONFUSED			
	OTHER			
INTEGUMENTARY	COLOR: NORMAL			
	PALE			
	CYANOTIC			
	JAUNDICED			
	OTHER			
	TURGOR: NORMAL			
	OTHER			
	TEMP: NORMAL			
	HOT			
	COLD			
	MOISTURE: NORMAL			
	DIAPHORETIC			
	OTHER			
	INTEGRITY: NORMAL			
	OTHER			
	PRESSURE POINTS: ASYMPTOMATIC			
	SYMPTOMATIC*			
	DECUBITUS CARE			
	ELBOW/HEEL PROTECTOR			
	EGG CRATE			
	K-PAD			
	THERAPEUTIC BLANKET			
	THERAPEUTIC BED ____			
	TEMP ____			
	OTHER			
SPEC. TO LAB	URINE			
	SPUTUM			
	GUIAC			
	STOOL			
	WOUND CULTURE			
	THROAT CULTURE			

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Figure 9

MCRH

Focused Nursing Documentation

Date:

Observation		Time	Focus	A·I·E	Narrative
Time	Int.				

SAMPLE

A = Assessment I = Intervention E = Evaluation

Used with permission of Midwest City Regional Hospital, Midwest City, OK.

- **Diagnostic data** — There may be special sheets for completed requisitions or typed reports to be attached. Many reports are computer generated.

- **Consent forms** — Patients usually sign a consent for treatment on admission to the hospital. Patients who go to surgery or have some special diagnostic tests performed sign consent forms. All of these are a part of the chart.

- **Special forms for admission, transfers and discharge** — Used by most agencies. Discharge planning may be documented.

- **Flow sheets other than the graphic sheet** — May be used for neuro checks, neurovascular checks, teaching situations, blood or urine testing for diabetics, or other activities

- **Reports of surgical procedures, anesthesia records and recovery room record** — Would be included for patients having surgery

- **Nursing care plan** — Contains nursing diagnoses, patient goals and nursing orders to direct care. A space for evaluation is included.

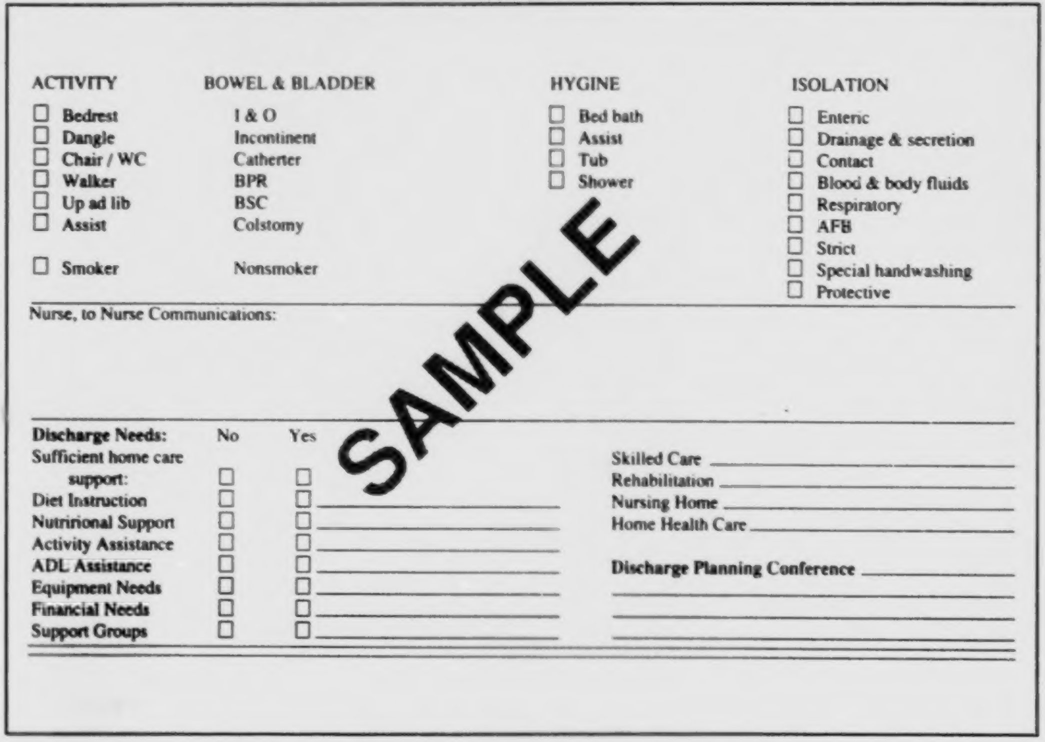
Members of the nursing staff do not contribute to all documents within the chart, but much valuable information is there for use in patient care. The wise nurse uses the many parts of the chart to give informed and appropriate care.

There are two other standard reports that are used regularly, but are not part of the patient's permanent record, the Kardex-type form and the change-of-shift report.

- **Kardex-type form** — While this form may not be a permanent part of the patient's record, it is an important aid in delivering care while the patient is hospitalized. Information needed by the nursing staff is transferred from the doctor's order sheet to this form. Medications to be given, activity allowed, type of diet, frequency of vital signs and treatments ordered are examples of the types of information found on this form. It is from this information that nurses organize and carry out care on a daily basis. Looking through all the orders on the doctor's order sheet could be very time-consuming, but since only current orders are found on the Kardex-type form, the nurse can find answers to questions about care more quickly.

Information on this form is recorded in pencil. It is updated as needed by erasing outdated information and replacing it with current orders.

Figure 10 Kardex-type form*



ACTIVITY
- ☐ Bedrest
- ☐ Dangle
- ☐ Chair / WC
- ☐ Walker
- ☐ Up ad lib
- ☐ Assist

- ☐ Smoker

BOWEL & BLADDER
- I & O
- Incontinent
- Catherter
- BPR
- BSC
- Colstomy

- Nonsmoker

HYGINE
- ☐ Bed bath
- ☐ Assist
- ☐ Tub
- ☐ Shower

ISOLATION
- ☐ Enteric
- ☐ Drainage & secretion
- ☐ Contact
- ☐ Blood & body fluids
- ☐ Respiratory
- ☐ AFB
- ☐ Strict
- ☐ Special handwashing
- ☐ Protective

SAMPLE

Nurse, to Nurse Communications:

Discharge Needs:	No	Yes
Sufficient home care support:	☐	☐
Diet Instruction	☐	☐ ____________
Nutrirional Support	☐	☐ ____________
Activity Assistance	☐	☐ ____________
ADL Assistance	☐	☐ ____________
Equipment Needs	☐	☐ ____________
Financial Needs	☐	☐ ____________
Support Groups	☐	☐ ____________

Skilled Care ____________

Rehabilitation ____________

Nursing Home ____________

Home Health Care ____________

Discharge Planning Conference ____________

- **The change of shift report** — A valuable communication aid. Nursing personnel reporting for work get a verbal account of the important observations and happenings of the previous shift. Some reports may be recorded prior to the oncoming shift's arrival. Other agencies may use walking rounds and actually see the patients as a part of report.

The Kardex-type form, nursing care plans, or some part of the patient's record may be reviewed as a part of the report.

---

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Computers are becoming increasingly important in the health care field and have become a common fixture in the hospital. They may be used to order diets, diagnostic tests and equipment from other departments. They can provide a nurse with a print-out on information similar to that on the Kardex-type form. In some institutions, all documentation is with a computer, including assessments and recording administration of medications.

GUIDELINES FOR COMPLETING REQUISITIONS

Nurses may have to complete requisitions to obtain some services such as diagnostic tests. In some health care facilities, the computer is taking the place of requisitions, but it is worthwhile to mention a few guidelines for completing them.

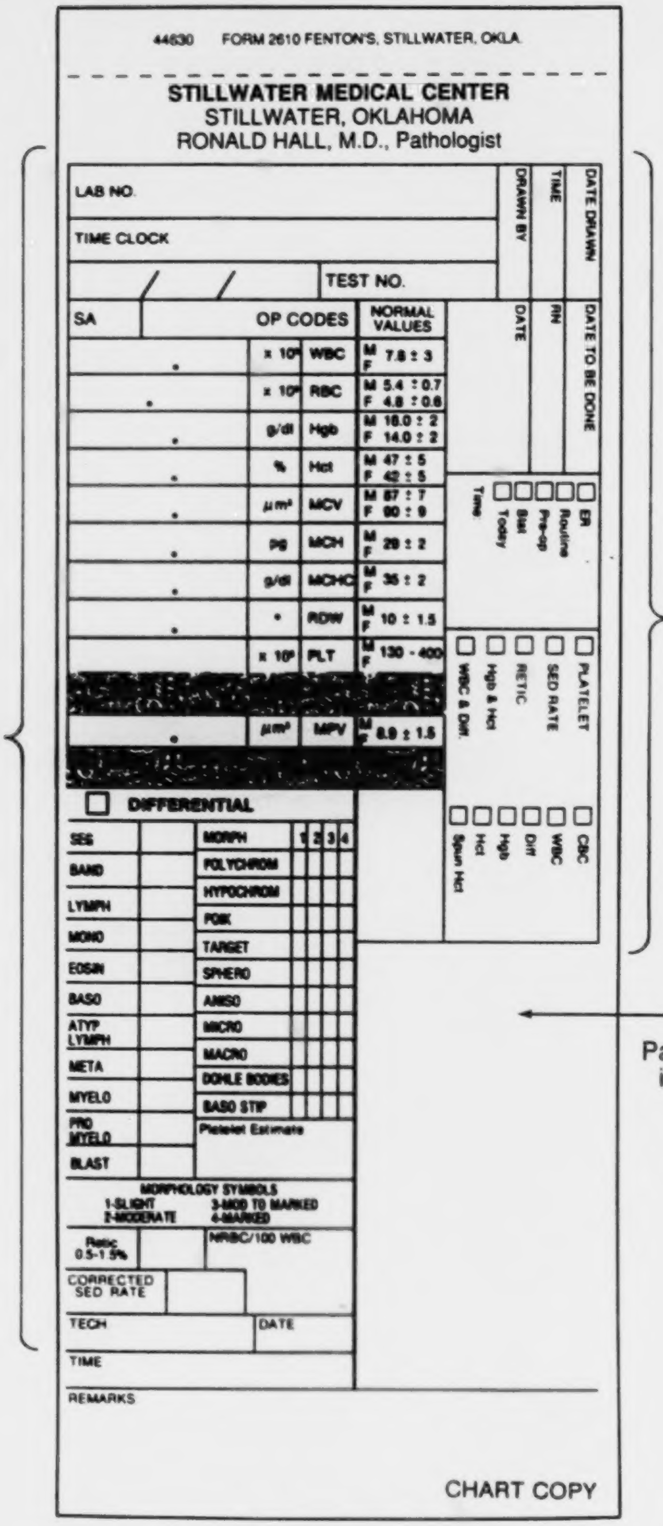
In a hospital or large clinic, the patient's name and other identifying information such as a patient ID number is often stamped on the requisition with an addressograph machine. If a name plate is not available, the name must be written clearly.

The major rule is to fill out the requisition completely, supplying all information requested. Any special instructions must also be included. This means that when requesting lab work, the requisition would include the fact that the patient is scheduled for surgery.

If the requisition is to accompany a specimen that has been collected, make sure it stays with the correct specimen. Many laboratory requisitions ask for the source of the specimen such as urine, blood, spinal fluid, etc.

As in all documentation, the requisition must be legible. A requisition that is completely filled out and legible can avoid confusion and unnecessary delays.

Figure 11



44630 FORM 2610 FENTON'S, STILLWATER, OKLA.

STILLWATER MEDICAL CENTER
STILLWATER, OKLAHOMA
RONALD HALL, M.D., Pathologist

LAB NO.		DRAWN BY	TIME	DATE DRAWN
TIME CLOCK				
/ /	TEST NO.			
SA	OP CODES	DATE	RN	DATE TO BE DONE

.	$\times 10^3$	WBC	M F 7.8 ± 3
.	$\times 10^6$	RBC	M 5.4 ± 0.7 F 4.8 ± 0.6
.	g/dl	Hgb	M 16.0 ± 2 F 14.0 ± 2
.	%	Hct	M 47 ± 5 F 42 ± 5
.	μm³	MCV	M 87 ± 7 F 90 ± 9
.	pg	MCH	M F 29 ± 2
.	g/dl	MCHC	M F 35 ± 2
.	*	RDW	M F 10 ± 1.5
	$\times 10^3$	PLT	M F 130 - 400
[redacted]			
.	μm³	MPV	M F 8.9 ± 1.5
[redacted]			

☐ ER
☐ Routine
☐ Pre-op
☐ Stat
☐ Today
Time

☐ PLATELET
☐ SED RATE
☐ RETIC
☐ Hgb & Hct
☐ WBC & Diff.

☐ CBC
☐ WBC
☐ Diff
☐ Hgb
☐ Hct
☐ Spun Hct

☐ **DIFFERENTIAL**

SEG		MORPH	1	2	3	4
BAND		POLYCHROM				
LYMPH		HYPOCHROM				
MONO		POIK				
EOSIN		TARGET				
BASO		SPHERO				
ATYP LYMPH		ANISO				
META		MICRO				
MYELO		MACRO				
PRO MYELO		DOHLE BODIES				
BLAST		BASO STIP				
		Platelet Estimate				

MORPHOLOGY SYMBOLS
1-SLIGHT 3-MOD TO MARKED
2-MODERATE 4-MARKED

Retic 0.5-1.5%		NRBC/100 WBC
CORRECTED SED RATE		
TECH	DATE	
TIME		

REMARKS

CHART COPY

Completed by lab.

Completed by nurse or other person ordering test.

Patient's name and other identifying information

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PROBLEM FOCUSED DOCUMENTATION

St. Francis Hospital in Tulsa, Oklahoma uses Problem-Focused Documentation as a variation of the Problem-oriented medical Record. Read through the explanation of their charting materials. Notice the types of information included on the progress record. Additional flow sheets are a part of the record for recording such items as IV status and medications.

Problem Focused Documentation*

1. *NURSING HISTORY AND ASSESSMENT RECORD* — Assess patient's health status using the 11 Functional Health Patterns.
2. *NURSING CARE PLAN* — Document nursing diagnosis (ses), projected patient outcome(s), and nursing orders with date(s) of implementation and completion.
3. *INTERVENTION RECORD* — Record nursing orders (and the dates initiated) for any orders which will be implemented repetitively.
4. *PROGRESS RECORD* — ENTRIES FALL UNDER THE FOLLOWING HEADINGS:

    INITIAL ENTRY — The initial observations of the Primary Nurse, Associate Primary Nurse, or shift nurse made at the time of patient admission and/or transfer to another unit. The narrative describes the patient's *response* to hospitalization and/or transfer. Do not repeat information which is found in the Nursing History and Assessment Record.

    PATIENT DATA — Information that is not related to a nursing diagnosis and is not documented elsewhere.

    NURSING DIAGNOSIS — Problem number, Problem Statement (P), and narrative; i.e.,

    #3 HEALTH MANAGEMENT DEFICIT — Return demonstration performed for Groshong dressing change -- needs more practice with cap change.

    PATIENT STATUS STICKER — Completed every 24 hours starting on hospital day 1. Completed by Primary Nurse, Associate Primary Nurse, or shift nurse.

*Used with permission of SAINT FRANCIS HOSPITAL, Tulsa, OK

The status sticker provides a framework for basic assessment data based on Marjory Gordon's functional health patterns. Other institutions use different forms of problem focused charting.

614

ACTIVITY SHEET 1

COMPLETE DOCUMENTATION

Functional Reading Skills
- Interpret forms and records
- Use content area vocabulary
- Interpret abbreviations/acronyms

Functional Writing Skills
- Complete forms and records

CHECK YOUR KNOWLEDGE OF DOCUMENTATION RULES

1. What kind of writing instrument should be used for charting?

2. Sign your name the way it should appear in the chart.

3. What should be on a page of a patient's chart before any information is recorded?

4. Correct this error in the accepted way. First record the information as given: Suture line intact on LUQ. Then correct it to read: right upper quadrant.

____

____

____

____

5. When should charting be done in relation to a procedure?

____

____

____

____

6. You notice a reddened area on the patient's right leg between the knee and hip. It is on the outside portion of the leg. How could you accurately indicate the area in charting?

____

____

____

____

Chart the following information.

7. Your patient looks pale. The skin feels cool and it is moist.

____

____

____

____

8. Your patient asks you to chase all the little green men out of her room. She says she is tired of hearing them sing *Old McDonald Had a Farm*.

____

____

____

____

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for: READING SKILLS
WRITING SKILLS

- Introduce the assignment to the students by discussing why reading and writing skills are important.
- Discuss with them the following skills which are relevant to this task.

  READING SKILLS

  - Using content area vocabulary
  - Interpreting abbreviations/acronyms

  WRITING SKILLS

  - Completing forms and records
- If students have difficulty using content area vocabulary, stress the importance of learning medical terminology.
- If students have difficulty interpreting abbreviations/acronyms:
  - Review the unit on Medical Terminology
  - Discuss the importance of using abbreviations accurately.
- If students have difficulty completing forms and records:
  - Examine the structure of the forms being used.
  - Discuss the importance of keeping accurate, legible records.

ACTIVITY SHEET 2

COMPLETE DOCUMENTATION VI

Functional Reading Skills
- Interpret forms and records
- Use content area vocabulary
- Interpret abbreviations/acronyms

Functional Writing Skills
- Complete forms and records

Job Acquisition/ Development Skills
- Master specific job task/procedure

PRACTICING CHARTING

Practice charting the following information using the rules of charting and appropriate abbreviation. Use a form provided by your instructor or use notebook paper.

Mrs. Burns has to go to X-ray at 9:00 a.m. for a chest X-ray. She leaves in a wheelchair and then returns twenty minutes later when she is finished.

While you give Mr. Lin his bath, he laughs and talks a great deal. He says nothing hurts him even though he had a cholecystectomy three days ago. You check his dressing and it seems to be in the right place and is clean and dry. He walks in the hallway during the 10 minutes it takes you to make his bed and straighten his unit. You complete his care at 9:45 a.m.

Dr. Blue changes Mr. Lopez's dressing while you assist him as he makes rounds at 8:30 a.m. You notice that there is a lot of pus on the soiled dressing. The wound has an awful odor.

When you finish bathing Mrs. Amati at 10:10 a.m., you assist her to a chair. She sits there for 10 minutes, but cries and says her head hurts when she is up. She goes back to bed and falls asleep 15 minutes later.

Mrs. Lone Bear had a soap solution enema. 750 cc of solution were given. She passed a large amount of dark brown stool that seemed hard, along with a little gas. The procedure was completed at 9:15 a.m. Mrs. Lone Bear had no problems receiving or expelling the enema.

After reporting for the morning shift you have completed an initial assessment for Mr. Chenault. He had an appendectomy yesterday, but today is doing well, with all findings within normal limits. He does say that he is tired of being in bed. He has an abdominal dressing and he is receiving IV fluids of 5% Dextrose in Normal Saline. An infusion pump is being used.

COMPLETE DOCUMENTATION

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 2

Skill development for: READING SKILLS
WRITING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

  READING SKILLS

  — Interpreting forms and records

  — Using content area vocabulary

  — Interpreting abbreviations/acronyms

  WRITING SKILLS

  — Completing forms and records

  EMPLOYABILITY SKILLS

  — Mastering a specific job task/procedure

- If students have difficulty mastering a specific job task/procedure:

  — Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.

  — Suggest they study each component of the procedure to determine which area is causing difficulty.

  — Review the entire procedure.

    — Team them with proficient students or professionals to practice the procedure.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

ACTIVITY SHEET 1

1. (Black) ball point pen
2. First initial, last name, and title
3. The patient's name
4. Suture intact on ~~LUQ~~ error VB RUQ
5. After the procedure is completed
6. Right lateral thigh
7. Color pale — skin cool and moist to touch
8. Requesting to have "all the little green men" chased out of her room — states she is tired of hearing them sing "Old McDonald Had a Farm"

ACTIVITY SHEET 2

0900 To X-ray per W/C for chest X-ray (Signature)
0920 Returned to room per W/C (Signature)

0945 Cheerful and talkative during A.M. care — Denies any c/o of pain — Abd. drsg. dry and intact — Amb. in hall x 10 min. (Signature)

0830 Drsg. changed by Dr. Blue — Lg. amt. purulent drainage $\overline{c}$ foul odor noted — DSD applied (Signature)

1020 Crying and c/o of headache $\overline{p}$ being up in chair for 10 min. — Assisted back to bed (Signature)

1035 Resting quietly in bed $\overline{c}$ eyes closed (Signature)

0915 750 cc SSE given — Lg. amt. hard dark brown stool $\overline{c}$ sm. amt. flatus returned — Tol. procedure well (Signature)

0800 Lying quietly in bed — Alert and responds appropriately to verbal stimuli — PERLA — Mucous membranes pink — Skin warm and dry to touch — Apical pulse strong and regular — Breath sounds clear and equal in all lung fields Abd. soft $\overline{c}$ bowel sounds present — Moves all extremities on command — Drsg. dry and intact to RLQ — 1000 cc. D5/NS infusing in lt. forearm per infusion pump @ 100 cc/hr. $\overline{s}$ edema or erythema at site — States he is tired of being in bed (Signature)

ASSIGNMENT SHEET 1

COMPLETE DOCUMENTATION VI

NAME ______________________________ SCORE ________

OBJECTIVE 7 **Obtain information from various chart pages.**

INTRODUCTION Since the chart is an accumulation of information about the patient, the nurse must be able to use the chart to learn about the patient and his or her care.

DIRECTIONS **Part 1** is an assignment to read the doctor's order sheet and determine specific information and orders regarding the patient. **Part 2** requires that you read and interpret a graphic record.

The chart forms and the questions are on the next several pages.

Functional Reading Skills
- Interpret forms and records
- Use content area vocabulary
- Interpret abbreviations/acronyms

Data Analysis and Display Skills
- Interpret charts and tables (numerical)
- Interpret graphs (line)

Job Acquisition/Development Skills
- Master specific job task/procedure

Part 1

Read the doctor's order sheet on the next page to determine the answers to the following questions. Write the answers in the blanks.

1. What activity is the doctor permitting?

   ____

2. What kind of diet can Mrs. North have?

   ____

3. What will she have in the morning for breakfast?

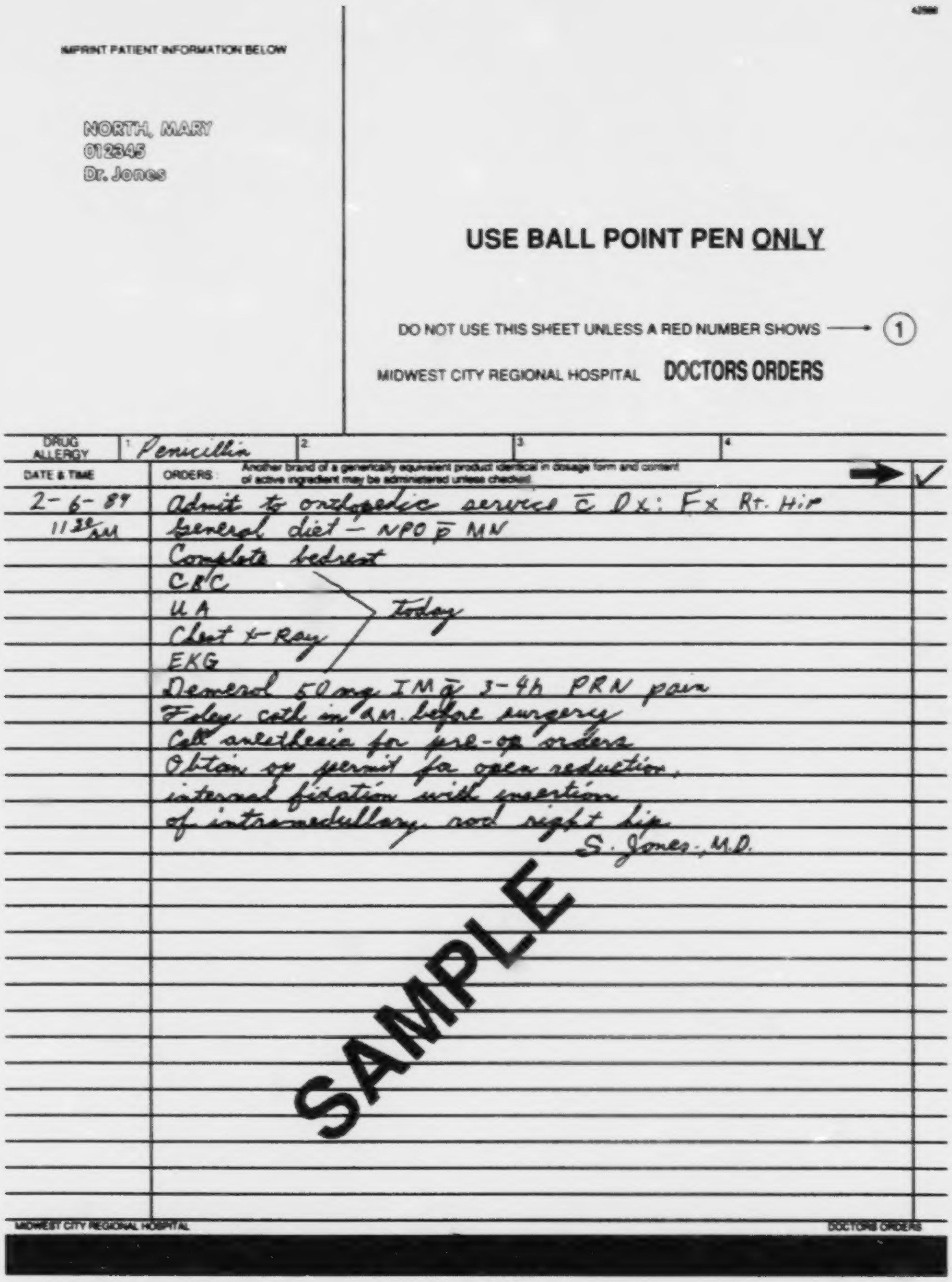
   ____

4. What diagnostic tests are ordered?

   ____

5. Can she have any medications?

   ____



IMPRINT PATIENT INFORMATION BELOW

NORTH, MARY
012345
Dr. Jones

USE BALL POINT PEN ONLY

DO NOT USE THIS SHEET UNLESS A RED NUMBER SHOWS → ①

MIDWEST CITY REGIONAL HOSPITAL **DOCTORS ORDERS**

DRUG ALLERGY	1. Penicillin	2.	3.	4.

DATE & TIME	ORDERS: Another brand of a generically equivalent product identical in dosage form and content of active ingredient may be administered unless checked ➔	✓
2-6-89	Admit to orthopedic service $\bar{c}$ Dx: Fx Rt. Hip	
11^{30} AM	General diet – NPO $\bar{p}$ MN	
	Complete bedrest	
	CBC	
	UA } today	
	Chest X-Ray	
	EKG	
	Demerol 50mg IM $\bar{q}$ 3-4h PRN pain	
	Foley cath in AM. before surgery	
	Call anesthesia for pre-op orders	
	Obtain op permit for open reduction,	
	internal fixation with insertion	
	of intramedullary rod right hip	
	S. Jones, M.D.	

SAMPLE

MIDWEST CITY REGIONAL HOSPITAL DOCTORS ORDERS

Form used with permission of Midwest City Regional Hospital, Midwest City, Oklahoma.

BEST COPY AVAILABLE

Part 2

Read the graphic record on the next page to determine the answers to the following questions. Write the answers in the blanks.

1. On what day was Mrs. North admitted?

   ____

2. What meals did she eat in the hospital on that day?

   ____

3. Who was her nurse on the 3-11 shift?

   ____

4. What were her admission vital signs?

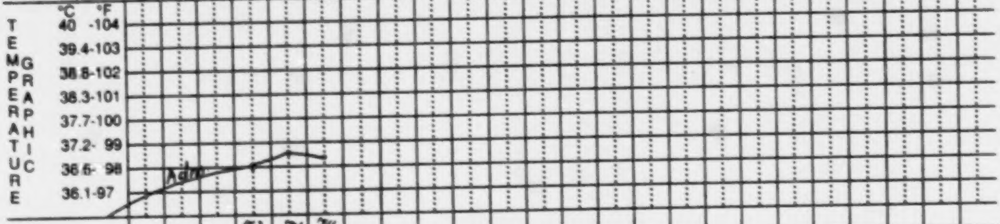
   ____

5. Which was greater, intake or output?

   ____

North, Mary
012345
Dr. Jones

DATE	2-6-91						2-7						2-8						2-9					
H.D./P.O. DAY																								
	A.M.			P.M.			A.M.			P.M.			A.M.			P.M.			A.M.			P.M.		
HOUR	12	4	8	12	4	8	12	4	8	12	4	8	12	4	8	12	4	8	12	4	8	12	4	8



Pulse				72	74	74																		
Respiration				16	16	18																		
Blood Pressure				[illegible]/80	[illegible]/76	[illegible]/78																		

Diet	Gen											
% Taken Other NPO	B:	L:	D: 50%	B:	L:	D:	B:	L:	D:	B:	L:	D:

SPECIAL PROCEDURES

A.M. Care	—			
P.M. Care	✓			
Siderails	11-7	11-7	11-7	11-7
Activitives	—			
Snack				
	7-3	7-3	7-3	7-3
Siderails	↑			
Activitives	Bedrest			
Snack				
	3-11	11	3-11	3-11
Siderails	↑			
Activitives	Bedrest			
Snack				

SAMPLE

INTAKE

	Oral	IV	Blood		Oral	IV	Blood		Oral	IV	Blood		Oral	IV	Blood	
10PM-6AM	—	|	|													
6AM-2PM	200															
2PM-10PM	600															
TOTALS	800															

OUTPUT

	Urine	Stool	Gastric		Urine	Stool	Gastric		Urine	Stool	Gastric		Urine	Stool	Gastric	
10PM-6AM	—	—	|													
6AM-2PM	150	—														
2PM-10PM	600	—														
TOTALS	750	0														

DOCTORS VISIT	Jones 6^{00}PM			
NURSE SIGN 11-7				
7-3	N. Evans RN			
3-11	B Stone RN			

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INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

Skill development for: READING SKILLS
MATHEMATICS SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, mathematics, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

  READING SKILLS

  - Interpreting forms and records
  - Using content area vocabulary
  - Interpreting abbreviations/acronyms

  MATHEMATICS SKILLS

  - Interpret charts and tables
  - Interpret graphs (line)

  EMPLOYABILITY

  - Mastering a specific job task/procedure

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty interpreting charts and/or graphs:
  - Examine the structure of the chart and/or graph.
  - Discuss the use of co-ordinates to plot a point on a chart or graph.

- Explain that graphs create a visual picture of factual information.

  EXAMPLE: On a line graph charting temperature, the line on the graph goes up as the temperature rises.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheets 1 and 2.

ASSIGNMENT SHEET 2 — COMPLETE DOCUMENTATION VI

NAME ______________________________ SCORE ________

OBJECTIVE 8 **Document information on various chart pages.**

INTRODUCTION

The nurse has many opportunities to add to the store of information in the patient's chart. The documentation needs to be neat and accurate so it will be useful to others. Information must be entered on the appropriate form in the appropriate fashion.

DIRECTIONS

Your instructor will provide you with appropriate charting materials to practice charting the following information as you would do in the clinical area. Follow your instructor's directions in using the charting material. Use the current date. Your patient is Mr. Carl Martin, a 75 year-old man hospitalized for pneumonia. Dr. Washington is his doctor.

SCENARIO

Functional Writing Skills
- Complete forms and records

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Develop good work habits/attitudes

At midnight, his temperature was 99, his pulse was 82 and his respirations were 18. The blood pressure was 136/84. During the night he drank 150 cc of fluid and voided 300 cc of urine. He remained in bed and slept most of the night. Siderails were in place on his bed.

At 8:00 a.m., his temperature was 98.4°F, his pulse was 78, and his respirations were 16. His blood pressure was 130/80. At breakfast he ate all of his food. The nurse helped him with a bath. He sat up in a chair for 30 minutes twice during the day shift. The siderails were kept up when he was in bed. He ate approximately 80% of his lunch. He drank 800 cc of fluid and voided 700 cc of urine. He also had a bowel movement.

At 4:00 p.m., his temperature was 99, his pulse was 80, and his respirations were 18. His blood pressure was 134/84. He ate only about half of his evening meal. He spent another 30 minutes up in a chair. His siderails remained up when he was in bed. He had about 500 cc of fluid to drink and voided 350 cc of urine.

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 2

Skill development for: WRITING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

  WRITING SKILLS

  - Completing forms and records

  EMPLOYABILITY SKILLS

  - Mastering a specific job task/procedure
  - Developing good work habits/attitudes

- If students have difficulty developing good work habits/attitudes:

  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits and attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheets 1 and 2.

ASSIGNMENT SHEET 3

COMPLETE DOCUMENTATION

VI

NAME ______________________ SCORE ________

OBJECTIVE 9

Document information using a traditional medical record.

INTRODUCTION

Many agencies use the narrative style note for at least some information. The nurse must be able to record information completely, but concisely using this style.

DIRECTIONS

Judy Fowler is a student practical nurse caring for Mrs. North, a woman with a fractured right hip. Document the following information in narrative style. Use notebook paper or charting material supplied by your instructor.

SCENARIO

Functional Writing Skills
- Complete forms and records

Job Acquisition/ Development Skills
- Master specific job task/procedure

Dr. Burris orders an SS enema for Mrs. North for her complaints of constipation. She says she has not had a bowel movement since the day before surgery. Judy gives 750 cc of the enema solution. Mrs. North is able to retain the enema without difficulty during administration. She is able to expel a large amount of brown, formed stool and also expels a large amount of flatus. After the enema she says she feels so much better now and asks Judy what she should do to avoid constipation in the future. Judy suggests that she eat all the fruits and vegetables on her tray at mealtimes and drink plenty of fluids. Judy tells her that extra juice is available. Judy also tells her that the transfer activities and movement in bed will be helpful.

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 3

Skill development for: WRITING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

  WRITING SKILLS

  — Completing forms and records

  EMPLOYABILITY SKILLS

  — Mastering a specific job task/procedure

- If students have difficulty mastering a specific job task/procedure:

  — Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.

  — Suggest they study each component of the procedure to determine which area is causing difficulty.

  — Review the entire procedure.

  — Team them with proficient students or professionals to practice the procedure.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

ASSIGNMENT SHEET 4

COMPLETE DOCUMENTATION

NAME ______________________________ SCORE ________

OBJECTIVE 10

Document information using a problem-oriented medical record.

INTRODUCTION

When the same information is documented in narrative and problem-oriented style, it will look different. The reader, however, should be able to understand the situation fully by reading either account.

DIRECTIONS

Judy Fowler is a student practical nurse caring for Mrs. North, a woman with a fractured right hip. Document the following information in problem-oriented style.

SCENARIO

Dr. Burris orders an SS enema for Mrs. North for her complaints of constipation. She says she has not had a bowel movement since the day before surgery. Judy gives 750 cc of the enema solution. Mrs. North is able to retain the enema without difficulty during administration. She is able to expel a large amount of brown, formed stool and also a large amount of flatus. After the enema she says she feels so much better now and asks Judy what she should do to avoid constipation in the future. Judy suggests that she eat all the fruits and vegetables on her tray at mealtimes and drink plenty of fluids. Judy tells her that extra juice is available. Judy also tells her that the transfer activities and movement in bed will be helpful.

____

____

____

____

____

____

____

____

Functional Writing Skills
- Complete forms and records

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Develop good work habits/attitudes

COMPLETE DOCUMENTATION

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 4

Skill development for: WRITING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

  WRITING SKILLS

  - Completing forms and records

  EMPLOYABILITY SKILLS

  - Mastering specific job task/procedures
  - Developing good work habits/attitudes
- If students have difficulty developing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits and attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.
- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheets 1 and 2.

ASSIGNMENT SHEET 5

COMPLETE DOCUMENTATION

VI

NAME ______________________________ SCORE ________

OBJECTIVE 11

Document information using a flow sheet or checklist style of charting.

INTRODUCTION

A flow sheet style of charting may save time in charting since the nurse can indicate which pre-printed items are appropriate.

DIRECTIONS

Use the following information to document an initial assessment (an assessment made when beginning to care for a patient) using a flow sheet style of assessment form. Use a flow sheet your instructor supplies.

NOTE: Some institutions require that an R.N. complete such forms.

SCENARIO

Functional Writing Skills
- Complete forms and records

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Develop good work habits/attitudes

Judy Fowler, a practical nursing student is taking care of Mary North a 78 year-old woman who has a fractured right hip. She has had a hip pinning done three days ago. Now as Judy begins caring for her, she completes an assessment.

Mrs. North is awake when Judy enters the room. She remembers Judy from the previous day and states that if she were not here in the hospital, she would be playing bridge today as she usually does on Thursdays.

Judy inspects the conjunctiva of the eye and finds it pink. There is rapid capillary refill in the nail beds. The skin feels warm when Judy touches it and no moisture is present.

Judy listens to the apical pulse and finds it strong and regular. The breath sounds are clear in all lung fields. Mrs. North says she hopes she will not develop pneumonia as she had once before and she is very pleased that she has had no chest pain or coughing. Her respirations are deep and regular.

Judy then examines the abdomen and finds active bowel sounds in all quadrants. The abdomen is soft when Judy palpates it. Mrs. North says she is becoming very worried because she hasn't had a bowel movement since she broke her hip, but she is glad she can eat and has not been bothered by any vomiting after surgery as she was with past surgeries. As Judy talks with her, she mentions several times that she has not had a bowel movement.

Mrs. North moves her upper extremities freely and uses them to help move herself in bed using the trapeze bar which the doctor has ordered. She also flexes her left knee to help in repositioning herself.

The dressing on the right hip is in place and dry. The Foley catheter is in place with clear yellow urine draining freely. The anti-embolism stockings which the doctor has ordered are being worn.

Judy looks at the right leg carefully and finds that Mrs. North moves the toes freely, as she also does with the left. Mrs. North readily recognizes which toe is being touched. Capillary refill is rapid with pink nailbeds. Judy finds the pedal pulse easily and there is no edema. The toes feel warm. Judy pushes the toes back toward the ankle and Mrs. North does not complain of any pain.

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 5

Skill development for: WRITING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing and employability skills are important.
- Discuss with them the following skills which are relevant tot his task.

  WRITING SKILLS

  — Completing forms and records

  EMPLOYABILITY SKILLS

  — Mastering a specific job task/procedure

  — Developing good work habits/attitudes

- If students have difficulty developing good work habits/attitudes:

  — Encourage them to become familiar with the entire procedure before they begin the work.

  — Discuss the role that good work habits and attitudes have in obtaining and retaining employment.

  — Discuss what behaviors and attitudes constitute good work habits.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheets 1 and 2.

ASSIGNMENT ANSWERS — COMPLETE DOCUMENTATION — VI

ASSIGNMENT SHEET 1

Part 1

1. Complete bedrest
2. General diet — Nothing after midnight
3. Nothing
4. CBC, UA, Chest X-ray, EKG
5. Demerol for pain

Part 2

1. 2-6-91
2. Dinner
3. B. Stone, R.N.
4. 98-72-16 144/80
5. Intake

ASSIGNMENT SHEET 2

Be certain student has completed all sections of the form clearly, completely, and concisely.

ASSIGNMENT SHEETS 3

750 cc SS enema given per doctor's order for relief of constipation. Lg amt. formed brown stool expelled c large amt. of flatus. Tol. procedure well. Requesting information on avoiding constipation. Advised to eat all fruits and vegetables provided, drink fluids freely and request extra juices. Also advised to participate in maximum amt. of activity allowed.

ASSIGNMENT SHEET 4

S "I haven't had a bowel movement since the day before surgery."

O No bowel movement since day before surgery.

A Constipation

P 750 cc SS enema administered with lg. mt formed brown stool and lg. amt. flatus expelled.
Instructed to eat all fruits and vegetables provided at meals, increase fluid intake and request extra juice.
Instructed to participate in maximum amt. of activity allowed.
Continue to encourage increased fiber and fluids.
Encourage movement.
Monitor stools.

ASSIGNMENT SHEET 5

Ensure form used has been completed correctly and completely.

WRITTEN TEST

COMPLETE DOCUMENTATION VI

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with documentation to their correct definitions. Write the correct letters in the blanks.

PART 1

______1. The 24-hour clock with time designated as 0001 through 2400

______2. A body which surveys hospitals and grants accreditation based on meeting set standards

______3. To assure safety and accuracy

______4. A chart document giving biographical and statistical information about the patient; may also be called fact sheet

______5. A chart document designed to record routine assessments

______6. A style of charting using a specified format for recording information; also called SOAP charting

______7. One of the components of SOAP or problem-oriented records

______8. All documents containing information about a single patient gathered together

a. Admission sheet

b. Chart

c. Data base

d. Flow sheet

e. JCAHO

f. Military time

g. Problem-oriented record

h. Quality assurance

PART 2

______1. A large file/card-like document designed for summarizing current nursing care required for a single patient

______2. A charting style using a specified format for recording information

______3. The page of the chart reserved specifically for the physician to write the orders directing the care given the patient

______4. A component of SOAP or problem-oriented records that lists all conditions identified by the data base

______5. To compare to a standard

______6. A type of flow sheet

______7. Charting style where a complete, although brief account of an event or action is written out

______8. Information not to be shared; secure

a. Audit

b. Confidential

c. Doctor's order sheet

d. Graphic sheet

e. Kardex-type form

f. Narrative

g. Problem list

h. SOAP charting

i. Progress notes

PART 3

______1. A component of the chart for physicians and other health care professionals to record information about a patient

______2. To give permission

a. Change of shift report

b. Consent

c. Documentation

d. Initial plan

______3. A component of the traditional chart for nurses to record information obtained in patient care

______4. Recording information; also called recording or charting

______5. A component of SOAP or problem-oriented records in which the treatment plan is developed

______6. A means of passing information from one shift to another

______7. A chart document for recording medications administered

e. Medication administration record

f. Nurse's notes

g. Progress notes

h. Doctor's order sheet

OBJECTIVE 2

Select reasons for charting information. Write an "X" in front of reasons for charting information.

______1. Communication among health care professionals.

______2. Chart is a legal document.

______3. Chart is an educational document.

______4. Proof for federal aid money to run facility.

______5. Chart is a research tool.

______6. An audit trail for facility's quality assurance programs.

______7. Proof for patient reimbursement from insurance companies.

OBJECTIVE 3

Choose the best word or phrase to complete statements about the rules of charting. Write the letters of the correct answers in the blanks.

______1. In most hospitals, nurses would be most likely to chart with a ___.

a. pencil
b. red pen
c. black pen
d. whatever is convenient

______2. A nurse is preparing to assist a new post-operative patient to walk. The best course of action in documenting the activity would be to ___.

a. ask someone else who has an easier assignment to do it
b. chart before the walk so she can devote more time to the patient
c. chart after the walk and include the patient's reactions
d. Leave it out of the chart because all post-operative patients are expected to walk

______3. The statement that would supply the most information and be the best example of charting is ___.

a. appears to be confused
b. is disoriented
c. is very uncooperative
d. states name and date, and says she is at her sister's home

______4. The example of charting that gives the LEAST specific information is ___.

a. circulation good throughout shift
b. ambulated in hall 10 minutes with walker
c. 100 cc catherized urine obtained for specimen
d. states "I feel like I'm floating in the air"

______5. A nurse's neighbor is in the hospital on another nursing unit. The neighbor's husband asks the nurse to obtain some information about lab test which have been completed. The most appropriate action for the nurse would be to ___.

a. comply with the request
b. have a nurse on the other unit obtain the information
c. call the lab for the test results
d. recommend that the neighbor call the doctor for the results

______6. If it is necessary to correct information which has been charted, the nurse should ___.

a. Draw a single line through the mistake
b. Use correction fluid to completely remove the mistake
c. Black out the mistake completely
d. Destroy the chart page and start over on a fresh one

______7. Which of the following suggestions would be appropriate for the nurse to use?

a. Chart only one entry per shift to conserve materials.
b. Use ditto marks when appropriate to save time.
c. Place patients' comments in quotation marks for emphasis.
d. Leave a line between entries to insure a neat, uncluttered appearance.

______8. Which statement would the nurse avoid in charting an enema?

a. SS enema given.
b. Good results.
c. Large amount of flatus expelled.
d. Tolerated procedure well.

______9. Mrs. Perez is in the hospital for dialysis. The nurse should realize that the original chart is the property of the ___.

a. patient
b. hospital
c. doctor
d. state health department

______10. If the nurse works in a facility using military time, an entry made at 1315 would be the same as ___.

a. 3:45 a.m.
b. 1:15 p.m.
c. 3:15 p.m.
d. 11:45 p.m.

OBJECTIVE 4

Select from a list true statements about information which should be charted. Write an "X" in the blank before each true statement.

______1. It is not necessary to chart administration of medications given on a routine basis.

______2. If the patient leaves the nursing unit for X-ray, it should be charted

______3. Instructions given to the patient should be documented.

______4. Documentation of specimens collected should be made only if there is something abnormal about them

______5. It is necessary to chart only physical changes in the patient.

______6. All visitors names, their relation to the patient, and hours of visitation must be charted.

______7. Fluid intake and output are charted.

______8. When a measure such as IV therapy is discontinued, it is documented.

OBJECTIVE 5

Distinguish among various styles of charting. Write an "N" in the blank before descriptions of narrative charting, a "P" before descriptions of problem-oriented charting, and an "F" before descriptions of flow sheet charting.

___ ___1. The entry begins with the patient's statement followed by assessment data observed by the nurse.

______2. The nurse completes a pre-printed assessment form.

______3. A problem list is one of the chart documents.

______4. The nurse writes out an assessment in long-hand at the beginning of each shift.

______5. A data base, problem list, initial plan, and progress notes are included.

______6. Nurses write out information on the nurses' notes.

______7. All health care professionals write on the progress notes.

______8. The amount of writing is minimal.

______9. It is important to differentiate between subjective and objective information.

OBJECTIVE 6

Match patient information to the chart form where it would be found. Write the correct letters in the blanks.

PART I

______1. The patient's pulse rate at 0800 a.m.

______2. The patient's home address

______3. Laboratory work to be done

______4. The patient's condition upon return for surgery

______5. The social worker's assessment of the patient

______6. The time of the last pain medication

a. Admission sheet

b. Doctor's order sheets

c. Change of shift report

d. Consent forms

e. Graphic sheet

f. Medication sheet

g. Nurse's notes

h. Progress sheet

PART II

______1. Orders for the patient's medication

______2. Assessments done at the beginning of shift

______3. The patient's insurance company

______4. The patient's permission for the doctor to perform surgery

______5. The patient's respirations at midnight

______6. The dietician's discussion of the patient's eating habits

a. Admission sheet

b. Anesthesia reports

c. Consent forms

d. Diagnostic forms

e. Doctor's order sheet

f. Graphic sheet

g. Nurse's notes

h. Progress sheet

NOTICE The following assignment sheets are not part of the Written Test. If these activities have not been completed, check with your instructor.

OBJECTIVE 7 **Obtain information from various chart pages.** SCORE ______

OBJECTIVE 8 **Document information on various chart pages.** SCORE ______

OBJECTIVE 9 **Document information using a traditional medical record.** SCORE ______

OBJECTIVE 10 **Document information using problem-oriented medical record.** SCORE ______

OBJECTIVE 11

Document information using a flow sheet or checklist style of charting.

SCORE ______

WRITTEN TEST ANSWERS

COMPLETE DOCUMENTATION VI

OBJECTIVE 1

PART I

1. f
2. e
3. h
4. a
5. d
6. g
7. c
8. b

PART II

1. e
2. h
3. c
4. g
5. a
6. d
7. f
8. b

PART III

1. g
2. b
3. f
4. c
5. d
6. a
7. e

OBJECTIVE 2

1, 2, 3, 5, 6, 7

OBJECTIVE 3

1. c
2. c
3. d
4. a
5. d
6. a
7. c
8. b
9. b
10. b

OBJECTIVE 4

2, 3, 7, 8

OBJECTIVE 5

1. P
2. F
3. P
4. N
5. P
6. N
7. P
8. F
9. P

OBJECTIVE 6

PART I

1. e
2. a
3. b
4. g
5. h
6. f

PART II

1. e
2. g
3. a
4. c
5. f
6. h

OBJECTIVES 7-11

Refer to answers to Assignment Sheets 1 through 5.

OBJECTIVE SHEET

PROVIDE PERSONAL CARE

VII

INTRODUCTION

Cleanliness is something that is generally valued. We look better and feel better when we are clean. Many patients are unable to provide for their own cleanliness. Part of nursing care is to provide for these needs which patients cannot provide for themselves. It is important to meet these needs safely and efficiently while keeping the patient comfortable.

UNIT OBJECTIVE

After completing this unit, the student should be able to select and carry out the appropriate care measures for a variety of patients. The student will show these competencies by completing the job sheets and written test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with personal care for patients to their correct definitions.
2. Select from a list true statements about the purposes of providing daily personal care.
3. Select from a list procedures included in AM care.
4. Select from a list procedures included in PM care.
5. Demonstrate the ability to:
    a. Assist with brushing teeth. (Job Sheet 1)
    b. Assist a weak or unconscious patient with oral hygiene. (Job Sheet 2)
    c. Assist with cleaning dentures. (Job Sheet 3)
    d. Comb hair. (Job Sheet 4)
    e. Shampoo hair. (Job Sheet 5)
    f. Shave a patient. (Job Sheet 6)
    g. Provide nail care. (Job Sheet 7)

h. Administer a back rub. (Job Sheet 8)

i. Dress a patient in a gown. (Job Sheet 9)

j. Provide catheter care. (Job Sheet 10)

k. Care for a patient with a catheter before and after a tub bath. (Job Sheet 11)

l. Provide care for the incontinent patient. (Job Sheet 12)

m. Assist with a tub bath or shower. (Job Sheet 13)

n. Give a complete bed bath. (Job Sheet 14)

o. Assist with a partial or self-help bath. (Job Sheet 15)

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
  - Assist students to conduct a chapter service project on providing personal care for patients.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
  - Plan a community or school health project.

DELIVERY

- Discuss unit objectives.

Objective 1

- Discuss terms associated with providing personal care for patients.
- Have students play reinforcement games and work crossword puzzles using terms.

Objective 2

- Discuss purposes of providing personal care.
- Have students share their ideas of what personal care means.

Objective 3

- Discuss procedures included in routine morning care.
- Discuss personal preferences in personal morning care.

Objective 4

- Discuss procedures in evening care.
- Discuss personal preferences in evening care.

APPLICATION

Objective 5

- Discuss Job Sheet 1.
- Have different types of equipment available for brushing teeth.
- Have students practice brushing one another's teeth.
- Discuss Job Sheet 2.
- Have different types of equipment available for providing care for weak or unconscious patient.
- Have students practice oral hygiene for weak or unconscious patient on mannequin.
- Discuss Job Sheet 3.
- If possible, have dentures available.
- Have students practice cleaning dentures.
- Show video, *Oral Care*.
- Discuss Job Sheet 4.

- Discuss various hair care practices.
- Have students practice combing one another's hair.
- Discuss Job Sheet 5.
- Have students practice improvising a shampoo trough for a bed shampoo.
- Discuss Job Sheet 6.
- Have various types of equipment available for shaving.
- Discuss Job Sheet 7.
- Have equipment available for nail care.
- Show video, *Grooming*.
- Discuss Job Sheet 8.
- Have students give each other back rubs.
- Discuss Job Sheet 9.
- Have students practice changing gown of mannequin with IV fluids.
- Discuss Job Sheet 10.
- Have students demonstrate catheter care on mannequin.
- Discuss Job Sheet 11.
- Have students practice with catheter plugs and taping catheter on mannequin.
- Discuss Job Sheet 12.
- Have adult diaper available.
- Have students practice changing adult diaper on mannequin.
- Discuss Job Sheet 13.

- Have students use bath thermometer to check various water temperatures in lab.
- Discuss Job Sheet 14.
- Show video, *Bed Bath* or *Bathing: Part I* and *Bathing: Part II.*
- Demonstrate a complete bed bath.
- Have students practice giving each other bed baths.
- Discuss Job Sheet 15.
- Demonstrate a partial or self-help bath.
- Have students practice giving each other partial or self-help baths.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.

- Give written test.
- Evaluate students on job sheets, if not previously completed.
- Reteach and retest if necessary.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Basic Clinical Skills: Bed Bath*, Medcom, Inc., P.O. Box 3225, Garden Grove, CA 92642. Phone: 800-541-0253.
- *Bathing: Part 1*, Concept Media, P.O. Box 19542, Irvine, CA 92713. Phone: 800-233-7078.
- *Bathing: Part 2*, Concept Media, P.O. Box 19542, Irvine, CA 92713. Phone: 800-233-7078.
- *Grooming*, Concept Media, P.O. Box 19542, Irvine, CA 92713. Phone: 800-233-7078.
- *Oral Care*, Concept Media, P.O. Box 19542, Irvine, CA 92713. Phone: 800-233-7078.

UNIT REFERENCES

- Hegner, Barbara R. and Esther Caldwell. *Assisting in Long-Term Care*. Delmar Publishers, Inc., Albany, New York, 1988.
- Hogan, Jean and Sheila A. Sorrentino. *Textbook for Long-Term Care Assistants*. The C.V. Mosby Company, St. Louis, Missouri, 1988.
- Kuffel, Joan. "Treating a Child with Head Lice", *RN*, September, 1987, p. 32.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.

- *Long-Term Care Nurse Aide*. Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1989.

- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques*. The C.V. Mosby Company, St. Louis, Missouri, 1986.

- *Procedures*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1983.

- Rosdahl, Caroline Bunker. *Textbook of Basic Nursing* (4th ed.). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1985.

- Sloan, Jamee Reid. *Practical Nursing-Volume 1*. Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.

- Sorrentino, Sheila A. *Textbook for Nursing Assistants* (2nd ed.). The C.V. Mosby Company, St. Louis, Missouri, 1987.

- Thompson, Eleanor Dumont. *Pediatric Nursing* (5th ed.). W.B. Saunders Company, Philadelphia, Pennsylvania, 1987.

- Timby, Barbara K. *Clinical Nursing Procedures*. J. B. Lippincott Company, Philadelphia, Pennsylvania, 1989.

OBJECTIVE 1

Match terms associated with personal care for patients to their correct definitions.

- **AM care** — Personal hygiene measures commonly carried out for patients in the morning
- **Axilla** — Area under the arm; armpit
- **Buttocks** — Fleshy protrusions of the gluteal muscles at the lower, posterior area of the trunk
- **Cornea** — Transparent anterior covering of eye
- **Cuticle** — Skin at base of nails
- **Dentifrice** — Substance used in cleaning teeth
- **Dentures** — Artificial teeth
- **Foley catheter** — Tubing with inflatable bulb at tip; remains in place to drain the urinary bladder

  NOTE: The Foley catheter is also called an indwelling catheter or a retention catheter.

- **Genitalia** — The reproductive organs and especially the external organs

  NOTE: Male genitalia serve both urinary and reproductive functions

- **Hygiene** — Cleanliness
- **Incontinent** — Unable to control bowel or bladder function
- **Labia** — Fleshy, lip-like structures of the external female genitalia
- **Lesion** — Any disturbance in the integrity of the skin
- **Lice** — Parasitic insects which live on the human body, on other mammals, and on birds

- **Nits** — Eggs of lice
- **Oral hygiene** — Procedures to ensure cleanliness of the mouth
- **Pediculosis** — The condition of being infested with lice
- **Perineum** — In females, the area from just above the urinary meatus to the anus and in males, the area between the scrotum and the anus
- **PM care** — Personal care measures commonly carried out before bedtime
- **Sclera** — White area visible in the eye; white of the eye
- **Scrotum** — A pouch-like structure of the male reproductive system
- **Sordes** — Accumulation of brown crusts on the teeth and lips
- **Taut** — Stretched tightly
- **Urinary meatus** — A body opening for the elimination of urine

OBJECTIVE 2

Select from a list true statements about the purposes of providing daily personal care.

In a hospital, the bath and other personal hygiene measures are considered a daily part of care. In a long-term care facility or a home health care situation, the bath may not be a part of daily care but may be scheduled two or three times a week. Some of the other personal care measures continue on a daily basis. Nurses may be able to meet a patient's physical and psychological needs while providing a bath and other personal care measures.

- **Cleanliness** — Prevention of skin problems, unpleasant odors and growth of pathogenic organisms can be helped through cleanliness.
- **Stimulates circulation** — Movement combined with the application of moist heat and friction to the skin will increase circulation, which aids in healing and prevents complications.

- **Maintains joint movement** — This may be active movement as the patient carries out parts of the care or it may be passive movement as the nurse moves parts of the body. Movement protects joint function and prevents muscle atrophy.

- **Stimulates Respiration** — The activity involved and changes of position benefit the respiratory system.

- **Increases elimination of waste products** — The body eliminates waste through the skin, respirations, urinary system and gastrointestinal system. Waste from the skin is physically removed by bathing. When respirations are stimulated, elimination of CO_2 is increased. Application of water frequently encourages urination. Movement increases the activity of the gastrointestinal system, making elimination of waste more likely.

- **Relaxes muscles** — Application of moist heat may help relax muscles, in turn relieving pain and helping the patient rest better.

- **Increases morale** — Generally, when people look better, they feel better about themselves.

- **Allows the nurse to observe the patient physically and mentally** — The nurse can observe all areas of the skin, the patient's movements, the patient's neurological, mental, and emotional status.

- **Provides time for teaching** — This could be instruction in personal hygiene measures or other care measures which the patient needs to know.

- **Develops the nurse-patient relationship** — There may be more time spent in completing the bath and other personal care measures than in any other activity during the day. Patients are more willing to share information with and to trust in a person who spends time with them. This is a potential benefit which should not be overlooked.

OBJECTIVE 3 **Select from a list procedures included in routine AM care.**

A number of individual procedures or nursing actions make up what is commonly regarded as *morning care* or *AM care*. The specific procedures will vary somewhat with the institution, the patient's condition and the patient's preferences. Generally included are:

- Bathing

  NOTE: This may be a complete or partial bed bath, a shower or a tub bath. This could be done as a part of PM Care according to patient preference and staffing patterns.

- Providing a back rub
- Dressing the patient or changing the hospital gown
- Oral hygiene
- Hair care

  NOTE: This may include shampooing the hair or only combing the hair

- Providing nail care
- Caring for a Foley catheter
- Providing a bedpan or urinal
- Shaving male patients
- Assisting female patients with make-up

Care of the patient's surroundings is usually completed at this time also:

- Changing bed linen.
- Damp-dusting of furniture to limit the growth and spread of pathogenic organisms.
- Removal of unnecessary items.
- Arranging remaining items conveniently and neatly.

- Emptying trash.

OBJECTIVE 4

Select from a list procedures included in routine PM care.

Personal care routines are a part of the normal routine for many individuals. Continuing them during illness makes them more comfortable physically and mentally and may help them receive needed rest. Measures which nurses might provide at night include:

- Appropriate oral hygiene
- Washing hands and face
- Offering the bedpan or urinal
- Providing perineal care, including care of Foley catheters
- Providing a back rub
- Changing soiled linen or straightening linen

HEAD LICE

Head lice, or pediculosis capitis, is a problem seen most often in children. The lice are transferred from one person to another on items such as combs, brushes, or hats. They do not jump or fly. It is not a cause for hospitalization, but nurses may see patients who are hospitalized for another problem with head lice. It must then be treated. Nurses frequently have to teach families how to treat the problem at home.

Diagnosis may be made by seeing the live lice moving around in the hair or around the hair line. It is more common to see the nits. The infected person may scratch or complain of an itching scalp.

Shampoos and rinses to treat head lice are available on both a prescription and non-prescription basis. These products must be used according to directions since some may be absorbed through the skin and cause dizziness and convulsions.

The shampoo is best given in a bathtub or shower with all clothing removed. The lice may try to leave the hair as the shampoo begins. The person administering the shampoo must be careful that the lice do not enter clothing or any surroundings. After completion of the shampoo, the tub or shower should be cleaned with hot water and bleach and the bathroom floor scrubbed with hot soapy water.

After the hair is washed, the nits must be removed. This is a tedious and time-consuming task. Cover the area with disposable material such as newspaper or plastic. The hair should be parted into small sections and combed a section at a time to remove the nits. Lighting must be good to detect the nits which look like grains of sand or specks of pepper, depending on hair color.

Clothing and linen which may have come in contact with the lice must be washed in hot water. Items which cannot be washed must be dry cleaned. Hats must be deloused.

The medicated shampoo should be repeated in 7-10 days and the hair examined frequently for nits for three months. If nits are present, the entire treatment should be repeated.

When head lice are discovered, others who have been in contact with the child should be notified to look for them also. It is not uncommon to find whole classrooms of school children infected. Teaching should stress reserving items such as combs, brushes, and hats for personal use only.

HAIR CARE

Practical nurses provide hair care for patients as part of personal care. Personal care includes providing services which will keep patients clean and comfortable. Patient hair care includes shampooing and drying the hair. It is outside the scope of practice for the nurse to provide hair *styling* for patients.

In order to provide appropriate hair care for all patients, nurses must be aware of the differences in hair types and be able to adjust hair care accordingly. Use the following guidelines to provide hair care for patients.

- **Talk to the patient.** Find out what hair products they use, what products they have with them and how they use them on their hair. Patients may prefer to have a family member or their own beautician come to style their hair.

- **Ask questions.** A majority of patients will have some kind of chemical or product on their hair. The nurse will need to know how the hair has been treated in order to prevent damage. Patients may have perms, and black patients may have a "curl" or a "press and curl." Each of these require different care to prevent damage.

- **Use a Ph-balanced shampoo and cream rinse.** A balanced shampoo will be less likely to damage hair in the event it has been chemically treated. Cream rinse will remove tangles from very curly hair.

CARE FOR CONTACT LENSES

INTRODUCTION

Contact lenses are worn in the eyes themselves. Although hard and soft lenses are both made of plastic, they require somewhat different care because of their construction. If the patient cannot care for his own lenses, the nurse needs to know whether the lenses are hard or soft.

EQUIPMENT AND SUPPLIES

- Storage case

  NOTE: If special storage case is not available, two plastic medicine cups may be labeled "right" and "left" and filled with normal saline or other soaking solution

- For hard lenses:
  Wetting, cleaning, and soaking solutions
- For soft lenses:
  Cleaning, rinsing, storage, and disinfection solutions

PROCEDURE

Assessment and Analysis

Determine patient's ability to assist in procedure.

Determine patient's normal practices in relation to care, storage, and cleaning of lenses.

Check for any nursing diagnoses relating to the eye.

Assess the eye for any signs of irritation, swelling, redness, or drainage.

Inspect the lenses for any signs of scratches or poor cleaning practices.

Assess the patient for any visual disturbances when the lenses are in place.

Planning

Wash hands before working with lenses in any manner.

Assemble all equipment in clean area.

Position patient in sitting or supine position for removal or insertion of lenses.

Place towel below patient's face when removing lenses.

NOTE: Towel will help catch lens if it flips out unexpectedly.

Implementation

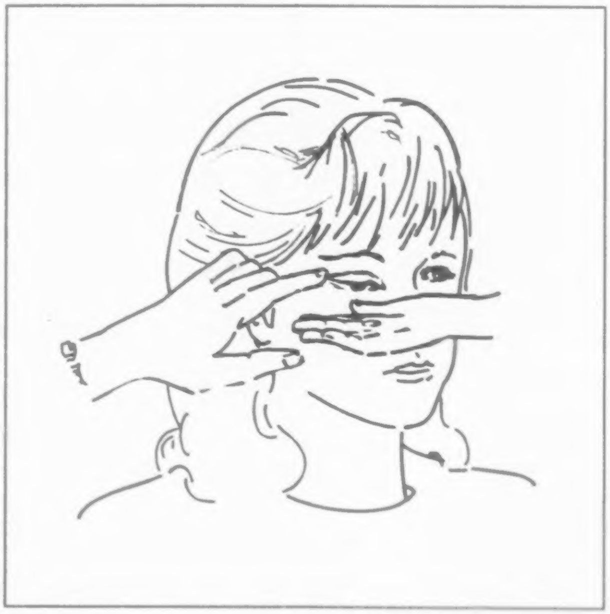
REMOVING LENSES

Removing of hard lenses when patient can assist

Use index finger at corner of eye to pull skin back toward ear.

Place opposite hand, cupped, below eye.

Instruct patient to blink to dislodge lens.



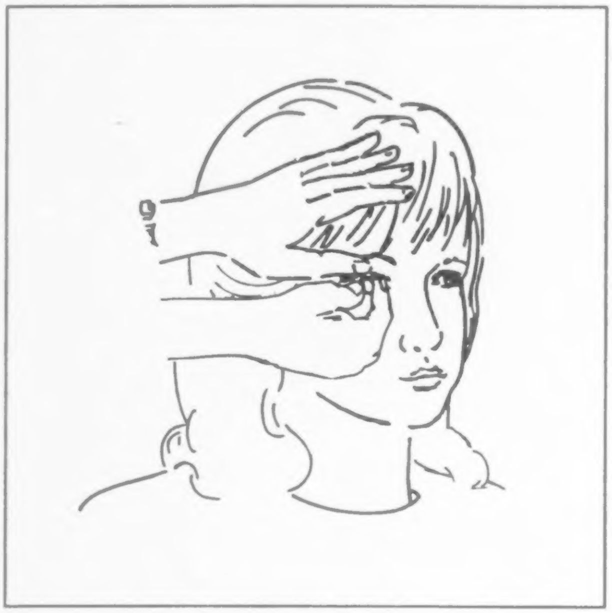
Removing hard lenses when patient cannot assist

Use thumbs of both hands to move upper and lower lids away from edges of lens.

668

Bring lower lid up to edge of lens and apply slight pressure to cause lens to dislodge.

Move both lids together to allow lens to slip out of eye.

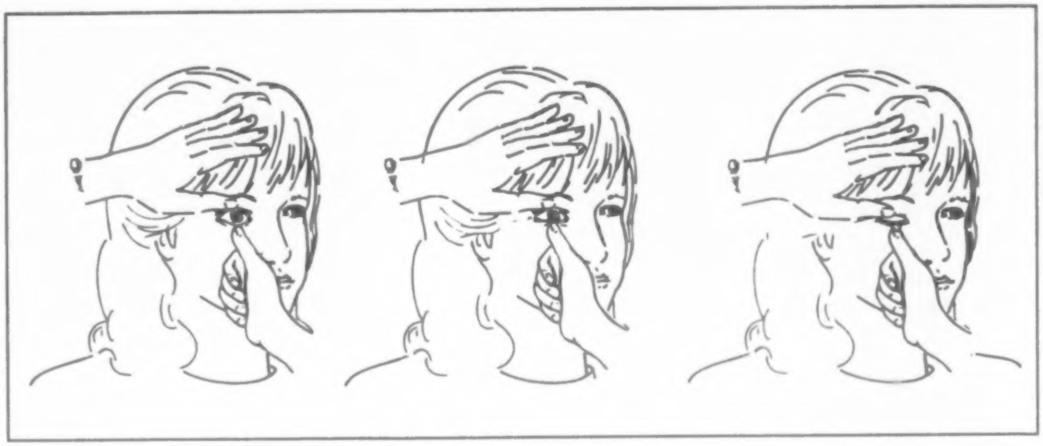


Removing soft lenses

Raise the upper eyelid and hold it against upper rim of eye.

Very gently place thumb and forefinger of opposite hand on lens.

Pinch lens to dislodge.



Place lens in proper storage compartment with soaking solution.

NOTE: Most contact lens wearers will clean the lens first.

A suction device is available to aid in removing contact lenses. They may be found in emergency rooms; however, some physicians discourage the use of such devices.

CLEANING LENSES

Place lens cleaner on both sides of lens and place the lens in the palm of one hand and gently rub with the opposite index finger.

NOTE: Soft lenses should be rubbed in a straight line, not a circular motion.

Rinse hard lenses with tap water and soft lenses with saline, then place in proper storage compartment with soaking solution.

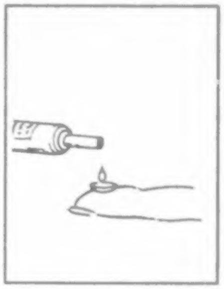
NOTE: Gas-permeable hard lenses and soft lenses require a more involved weekly enzyming process. Product instructions should be followed. Some soft-lens wearers use a heat-cleaning method.

INSERTING LENSES

Inserting hard lenses

Remove lens from case and rinse with tap water.

Place a drop of wetting solution on concave surface of lens.



Place convex surface of lens on index finger of dominant hand.

Separate eyelids with thumb and index finger of non-dominant hand.

Place lens gently on cornea.

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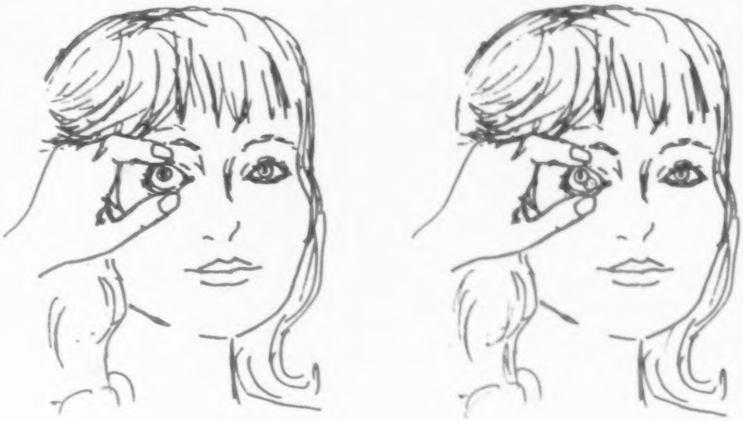
Inserting soft lenses

Remove lens from storage case and clean as previously described.

Wet lens with saline solution.

Position convex surface of lens on index finger of dominant hand.

NOTE: Lens is inside out if there is a lip on edge.



Separate eyelids with thumb and index finger of non-dominant hand.

Instruct the patient to look upward.

Place lens over sclera.

Have patient close eyes and roll toward lens.

Evaluation

Evaluate using the following criteria:

- a. Vision is clear.
- b. Lenses are comfortable in eyes.

Documentation

Record:

- a. Any problems with vision.
- b. Any redness, swelling, or drainage from eye.
- c. Any complaints of discomfort.

GIVE A WHIRLPOOL BATH

INTRODUCTION

Many long-term care facilities have whirlpool tubs available for bathing. The use of warm water in motion stimulates circulation, which is desirable in the elderly. It can also have a relaxing effect on the bather.

The resident is usually lifted into the tub by means of a hydraulic lift or special lift chair. While the actual equipment may vary, making it important to follow the manufacturer's instructions, some principles remain the same.

EQUIPMENT AND SUPPLIES

- Wash cloths
- Towels
- Bath blanket
- Clean gown or clothing
- Lotion and deodorant as desired by patient
- Shower cap if desired
- Liquid soap
- Disinfectant for cleaning tub
- Bath thermometer if needed
- Hydraulic lift or lift chair

PROCEDURE

Assessment and Analysis

1. Determine the patient's need for assistance.

2. Examine the skin for any bruises, rashes, reddened areas, breaks in the skin, or changes in color.

3. Check for any reduction in sensation that would alter ability to feel water temperature.

4. Check for any dressings, incisions, or catheters which would need attention before bathing.

5. Note any nursing diagnoses relative to bathing or skin care.

Planning

6. Identify patient and explain procedure.

7. Prepare any special areas such as catheters.

8. Gather all equipment.

9. Check temperature of tub room for adequate warmth.

10. Clean tub with disinfectant solution.

11. Fill tub with water according to manufacturer's directions, usually to a level about 8 inches from the top and about 100°F.

12. Add liquid soap if desired according to manufacturer's directions.

Implementation

13. Transport to tub room.

14. Assist patient to undress.

15. Place two towels for lifting into tub.

16. Re-check water temperature.

17. Follow manufacturer's directions in using lift or lift chair to place patient in tub.

    NOTE: Make sure all safety belts are used and all latches are securely fastened. Patients may be fearful of the lift through the air. Provide support and guide the chair as needed.

CAUTION!
INJURY POSSIBLE. Patient may be injured if feet do not clear edge of tub. Support and guide patient's feet over tub's edge.

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18. Lower the patient slowly into the tub until the water is about chest level.

19. Activate the whirlpool action.

20. Assist with washing as needed.

21. Continue whirlpool action for approximately five minutes.

22. Slowly remove patient from the tub by reversing the steps taken in placing the patient into the tub.

23. Dry patient thoroughly and assist with dressing.

24. Return patient to room and make comfortable.

25. Remove all soiled towels, washcloths, and other linens from tub room.

26. Clean tub with disinfectant.

Evaluation

27. Evaluate using the following criteria:

    a. Skin is clean, dry and free of drainage or odor.

    b. There are no areas of redness which would indicate a burn.

    c. Patient feels relaxed and comfortable.

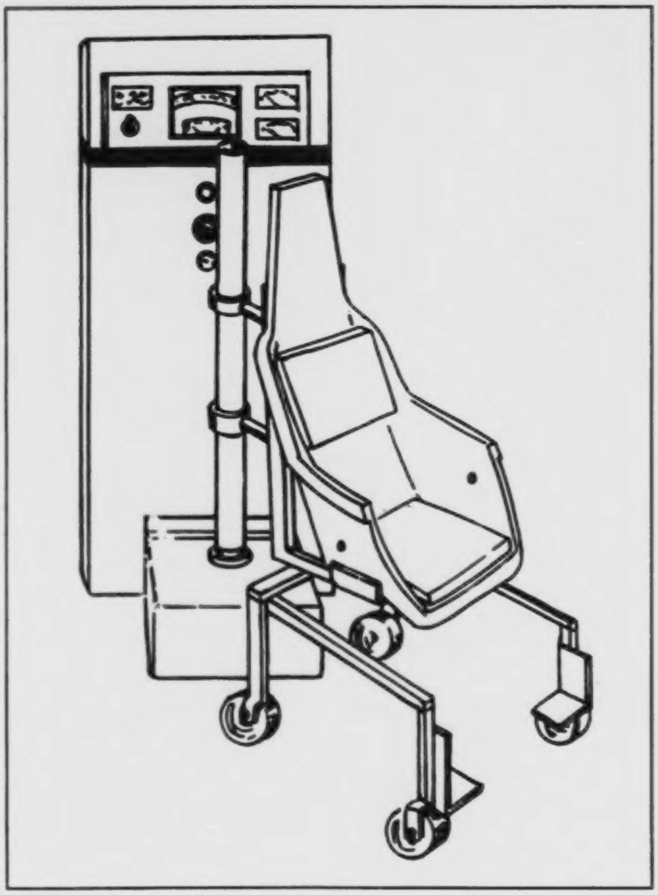
Documentation

28. Record:

    a. Completion of bath according to agency policy.

    b. Any reddened areas, breaks in the skin, bruises, rashes, or other changes in the skin.

    c. Any difficulty in movement, weakness, dizziness, shortness of breath, or other symptom experienced by the patient.



Lift chair

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PERFORM PERSONAL HYGIENE MEASURES IN THE ISOLATION UNIT

INTRODUCTION

Even though a patient may require isolation precautions, he still will need a number of other nursing procedures completed. Some variation may be necessary in order to maintain the isolation precautions. The exact measure will depend upon the organism and disease being isolated. Generally, the following measures are for the strictest of isolation procedure.

EQUIPMENT

- Isolation cart outside door containing gowns, masks, gloves, isolation bags (usually red), fasteners for bags, labels, marking pen
- Private room with toilet and sink
- Instruction card for door
- Soap dispenser
- Paper towels
- Plastic lined trash container
- Linen hamper with liner
- Disposable personal care utensils (Bath basin, emesis basin, water pitcher, drinking glass, etc.)

PROCEDURE

Assessment and Analysis

1. Check medical diagnosis to determine the exact type of materials needed.

2. Check nursing diagnoses to determine specific needs of patient.

3. Check agency policy manual to determine specific procedures.

Planning

4. Assemble all equipment.

   NOTE: Be certain all necessary items are present to avoid coming back out of isolation unit.

Implementation

Entering unit:

5. Wash hands.
6. Don protective gear indicated by type of isolation.
7. Place any equipment being brought into room on clean paper towel to avoid contamination.

   NOTE: Take in only supplies that will be used since items will have to be discarded or thoroughly cleaned before use by another patient.

8. Provide personal care as usual but while wearing all necessary protective gear.
9. Avoid getting disposable gown wet since this contaminates clothing beneath.
10. Place all linens in lined linen hamper in room.
11. Place all trash in lined trash receptacle in room.

Removing items from room:

12. Arrange for an assistant to work outside the room.
13. Follow instructions for double bagging.

Leaving room:

14. Remove protective gear using correct technique.
15. Wash hands.
16. Use clean paper towel to open door.
17. Dispose of towel in receptacle outside room.
18. Wash hands.

Evaluate

Evaluate using the following criteria:

a. Care was given without contaminating persons or equipment.

b. All contaminated materials were discarded or removed from unit using double-bagging technique.

c. Patient is comfortable and isolation unit is neat and clean.

Documentation

Follow agency policy in documenting each procedure as appropriate.

DETERMINE APPROPRIATE WATER TEMPERATURES

INTRODUCTION

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Interactive Communication Skills
- Work effectively in a group

General Relating Skills
- Participate in group activities

Job Acquisition/ Development Skills
- Master specific job task/procedure

Water temperatures which are too hot can burn skin. Water temperatures which are too cold can be quite uncomfortable. There are recognized ranges of temperatures for comfort and safety for most people. These should be used in such activities as bathing.

Bath thermometers used to measure water temperature are often not available in the clinical setting and gauges attached to equipment such as whirlpool tubs may not function correctly. Therefore, the nurse should have some understanding of how appropriate temperatures feel.

Part I

Using a bath thermometer, fill a bath basin with water at the following temperatures.

NOTE: The class may want to work in groups with each group or group member providing water at a different temperature for comparison by all.

1. 95 degrees F.
2. 100 degrees F.
3. 105 degrees F.
4. 110 degrees F.
5. 115 degrees F.
6. 120 degrees F.

Part II

Try to judge the approximate temperatures of three basins of water which have been filled by the instructor or a classmate. Then measure the actual temperature with a bath thermometer.

	Estimated	**Actual**
1.	__________	__________
2.	__________	__________
3.	__________	__________

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for: MATHEMATICS SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why mathematics, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

  MATHEMATICS SKILLS

  — Using English and metric measures

  — Making measurements

  ORAL COMMUNICATION SKILLS

  — Working effectively in a group

  INTERPERSONAL/RELATING SKILLS

  — Participate in group activities

  EMPLOYABILITY SKILLS

  — Mastering specific job task/procedure

- If students have difficulty using English and metric measures or making measurements:

  — Review the units of measure in the English and metric systems.

  — Determine which system is needed for this procedure.

- If students have difficulty working effectively in a group:
  - Review oral communication and interpersonal or relating skills.
  - Discuss the importance of working well with others.
  - Discuss each student's role in the group.
- If students have difficulty mastering a specific job task/procedure:
  - Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.
  - Suggest they study each component of the procedure to determine which area is causing difficulty.
  - Review the entire procedure.
  - Team them with proficient students or professionals to practice the procedure.

JOB SHEET 1

PROVIDE PERSONAL CARE

VII

OBJECTIVE 5a

Assist with brushing teeth.

INTRODUCTION

Providing thorough oral hygiene for patients can accomplish several purposes.

Maintains health of teeth and gums

Permits assessment of teeth and gums for any developing problems which may need attention

Improves appetite by eliminating unpleasant tastes

Eliminates unpleasant odors

Increases patient's comfort and self-esteem

Provides time for health teaching concerning care of teeth of gums

EQUIPMENT

- Toothbrush (Most dentists recommend one with soft bristles.)
- Toothpaste or suitable dentifrice

NOTE: Commercially prepared foam toothbrushes pre-treated with dentifrice are available for patients without their own toothbrushes.

- Emesis basin
- Cup for water
- Mouthwash if desired
- Tissues
- Towel
- Clean gloves

NOTE: Special equipment and procedures may be ordered for special situations such as after oral surgery.

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Assessment and Analysis

1. Determine patient's need for assistance.
2. Note any medical or nursing diagnoses related to the oral cavity.

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- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/ patients

General Relating Skills
- Interact with clients/ customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/ patients

3. Note the condition of the patient's lips, teeth, tongue, and gums.

Planning

4. Identify patient and explain procedure.
5. Provide privacy.
6. Wash hands.
7. Obtain all supplies needed and place on overbed table.
8. Raise patient to Fowler's position, if not contraindicated.
9. Place towel over chest to protect gown and bedding.
10. Apply clean gloves.

Implementation

11. Pour water over toothbrush and apply toothpaste.
12. Assist patient as needed to brush all surfaces of teeth. Observe the patient's technique if he is completing oral hygiene.
    a. Place brush at gum line at 45 degree angle.
    b. Brush from gum line to crown of tooth.
    c. Brush inner surfaces of teeth.
    d. Brush back and forth on chewing surfaces.
13. Gently brush tongue.
14. Allow patient to rinse with clear water.
15. Hold emesis basin under chin or place conveniently on overbed table for patient to spit into.
16. Use mouthwash as patient desires.
17. Blot mouth dry with tissue.

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18. Rinse toothbrush under running water and store in a clean place.

19. Rinse, dry, and replace emesis basin.

20. Remove gloves without contaminating self and dispose of correctly.

21. Wash hands.

22. Make patient comfortable.

Evaluation

23. Evaluate using following criteria:

    a. All surfaces of teeth appear clean.

    b. Gums, tongue, and mucous membrane appear pink and intact.

    c. Breath smells clean.

Documentation

24. Follow agency procedure in documenting completion of oral hygiene.

    a. Record any abnormal findings involving the lips, teeth, gums, or tongue.

    b. Record any difficulty patient had with manipulating equipment or expectorating fluid.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for:
READING SKILLS
WRITING SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

  - Mastering specific job task/procedure
  - Applying safety practices/procedures
  - Practicing good work habits/attitudes
  - Dealing effectively with customers/clients/patients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues:
  - Discuss health conditions that can alter personal care routines.
  - Discuss health conditions that can be identified during the personal care routine.
  - Discuss ways in which personal care can improve health conditions.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions for a procedure and review them as needed.

  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient with dignity.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal or relating skills.

- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.

- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors constitute good work habits.
  - Make sure the student knows what is expected of him or her.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

OBJECTIVE 5b

Assist a weak or unconscious patient with oral hygiene.

INTRODUCTION

The weak or unconscious patient needs oral hygiene for many of the same reasons as any one else. Additionally, there is a tendency for these people to breathe through their mouths drying out mucous membranes. The mucous membranes in turn, may crack and become infected, causing more problems and increasing the patient's discomfort. This makes application of lubricants essential for these patients.

A condition known as sordes may also develop when a person cannot perform oral hygiene. Sordes refers to brown crusts or accumulations about the lips and mouth.

Since these patients have little or no ability to swallow, safety is a major consideration in carrying out oral hygiene for them. This is not an excuse to reduce the frequency of oral hygiene. If anything, the frequency should be increased to counteract the effects of dryness.

EQUIPMENT AND SUPPLIES

NOTE: Appropriate materials should be chosen from among the following possible supplies.

- Toothbrush
- Toothpaste
- Commercially prepared sponge toothbrush
- Tongue blades wrapped with 4 x 4 gauze
- Mouth wash
- Emesis basin
- Cup for water
- Bulb-type irrigating syringe
- Towel
- Tissues
- Clean gloves
- Lubricant

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- Suction equipment

  NOTE: This should be available in case the patient has difficulty handling fluids placed in the oral cavity.

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Assessment and Analysis

1. Determine patient's level of consciousness.
2. Note any medical or nursing diagnoses related to the oral cavity.
3. Note the condition of the patient's lips, teeth, tongue, and gums. Check for any loose teeth.

Planning

4. Identify patient and explain procedure.
5. Provide privacy.
6. Wash hands.
7. Obtain all supplies needed.
8. Check for operation of suction equipment.
9. Position patient on side so fluid may easily drain out of mouth instead of down the throat.
10. Place towel across chest and under chin.
11. Place emesis basin under chin.
12. Put on clean gloves.

Implementation

13. Open patient's mouth and insert tongue blade to keep open if necessary.
14. Use appropriate cleaning material to clean teeth, tongue and gums

    NOTE: The tongue blade padded with 4 x 4 gauze can be dipped in mouthwash for use as a cleaning agent.

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Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients

   a. Clean teeth from gum line to crown.

   b. Clean inside surfaces of teeth.

   c. Clean chewing surfaces of teeth.

15. Carefully use bulb syringe to place small amount of water into oral cavity and withdraw it if not contraindicated. Suction equipment may be used to remove fluid.

16. Dry lips and face with tissue.

17. Apply appropriate lubricant to patient's lips.

    EXAMPLE: Petroleum jelly

18. Rinse toothbrush under running water if used and store in clean place.

19. Rinse, dry, and store emesis basin.

20. Dispose of all disposable items.

21. Remove gloves without contaminating self.

22. Wash hands.

23. Reposition patient comfortably.

Evaluation

24. Evaluate using following criteria:

    a. Teeth, gums, tongue, and lips should be clean.

    b. Lips, tongue, gums, and mucous membrane should be intact, moist, and pink.

    c. Breath smells clean.

Documentation

25. Follow agency procedure in documenting completion of oral hygiene.

    a. Record and report any abnormal findings involving the lips, teeth, gums, or tongue.

    b. Record any difficulty patient had with fluid used.

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PROVIDE PERSONAL CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

  - Mastering specific job task/procedure
  - Applying safety practices/procedures
  - Practicing good work habits/attitudes
  - Dealing effectively with customers/clients/patients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues:
  - Discuss health conditions that can alter personal care routines.
  - Discuss health conditions that can be identified during the personal care routine.
  - Discuss ways in which personal care can improve health conditions.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions for a procedure and review them as needed.

  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient with dignity.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal or relating skills.

- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.

- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors constitute good work habits.
  - Make sure the student knows what is expected of him or her.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

OBJECTIVE 5c

Assist with cleaning dentures.

INTRODUCTION

Dentures or partial plates represent a considerable financial investment. The nurse caring for the patient who has dentures must take care to protect this investment. Dentures can also be a source of irritation if they are not properly fitted and kept clean. Assessment of the oral cavity and thorough cleaning is therefore important. Dentures can improve eating habits, safeguarding health and aiding recovery. Their care is an important intervention. Even if the dentures are not worn, the mouth should be cleaned.

EQUIPMENT AND SUPPLIES

- Denture cup
- Denture cleaner
- Toothbrush
- 4 x 4 gauze square
- Clean gloves
- Mouthwash
- Tissues
- Towel
- Denture adhesive if desired

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Assessment and Analysis

1. Determine patient's need for assistance.

2. Note any medical or nursing diagnoses related to the oral cavity.

3. Note the condition of the patient's lips, tongue, gums, and dentures.

4. Observe the patient's technique in caring for the dentures.

Planning

5. Identify patient and explain procedure.

6. Provide privacy.

7. Wash hands.

8. Obtain all supplies needed, including a denture cup clearly marked with the patient's name.

- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions

- Communicate with clients/customers/ patients

General Relating Skills
- Interact with clients/ customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/ patients

9. Raise bed to Fowler's position if patient will assist and this position is not contraindicated.

10. Apply clean gloves

11. Fill bath basin or wash basin in bathroom with cool or slightly warm water.

NOTICE!

DAMAGE POSSIBLE. Dentures may crack if dropped in sink or basin. Place wash cloth or towel in bottom of sink or basin before cleaning dentures.

Implementation

12. Use gauze square to remove dentures from patient's mouth or have patient remove dentures.

    NOTE: The gauze square helps prevent the dentures from slipping away and breaking.

13. Place dentures in denture cup clearly labeled with patient's name.

    NOTE: Label *cup*, not just the lid.

14. Place cool water and denture cleaner (if available) in denture cup for soaking prior to cleaning, if desired.

15. Clean dentures with toothbrush and dentifrice, holding over water.

    a. Brush all surfaces much as with natural teeth.

    b. Inspect dentures for cracks or rough areas.

16. Rinse dentures thoroughly.

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17. Return to denture cup with fresh water until dentures are replaced in the patient's mouth.

NOTICE!

DAMAGE POSSIBLE. Dentures may crack if allowed to dry out. Keep dentures in water-filled cup when not in patient's mouth.

---

18. Provide mouthwash or cool water for the patient to rinse his/her mouth.

    NOTE: Patients who have partial plates will need appropriate oral hygiene for their natural teeth.

19. Inspect tongue and gums for integrity and cleanliness.
20. Clean tongue and gums with sponge toothbrushes if needed.
21. Replace dentures in mouth using denture adhesive as desired or store denture cup with dentures inside in a safe place.

    NOTE: Dentures are safer if stored inside the drawer of the beside table than if left sitting out on the bedside table or overbed table. Always clean dentures before storing.

22. Rinse toothbrush under running water and store in a clean place.
23. Rinse, dry, and replace emesis basin.
24. Remove gloves without contaminating self and dispose of correctly.
25. Wash hands.
26. Make patient comfortable and position appropriately.

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Evaluation

27. Evaluate using the following criteria

    a. All surfaces of dentures and natural teeth appear clean.

    b. Gums, tongue, and mucous membrane appear pink and intact.

    c. Dentures fit well without any cracks, breaks, or rough edges. There are no loose teeth.

    d. Breath smells clean.

Documentation

28. Follow agency procedure in documenting completion of oral hygiene.

    a. Record and report any abnormal finding involving the lips, teeth, gums, tongue, or dentures.

    b. Record any difficulty patient had with manipulating equipment or expectorating fluid.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues:
  - Discuss health conditions that can alter personal care routines.
  - Discuss health conditions that can be identified during the personal care routine.
  - Discuss ways in which personal care can improve health conditions.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions for a procedure and review them as needed.

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  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty developing esteem in self/others:

  - Discuss the importance of treating the patient with dignity.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal or relating skills.

- If students have difficulty applying safety practices/procedures:

  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.

- If students have difficulty practicing good work habits/attitudes:

  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors constitute good work habits.
  - Make sure the student knows what is expected of him or her.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

JOB SHEET 4 — PROVIDE PERSONAL CARE — VII

OBJECTIVE 5d

Comb hair.

INTRODUCTION

Hair which is clean and neatly arranged adds to a person's physical appearance and sense of well-being. When patients cannot carry out hair care on their own, the nurse should be prepared to assist. Since the hair also reflects the individual's health status, assessment of the hair can assist us in our overall assessment of the patient.

NOTE: Read Supplement 2 on hair care.

EQUIPMENT AND SUPPLIES

- Comb and/or brush
- Towel
- Hair care products such as mousse, hair spray, or oil as desired by patient
- Mirror (Optional)
- Clips, combs, rubber bands, or other items desired by patient or useful in controlling hair

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Determine patient's need for assistance.
2. Note any medical or nursing diagnoses related to the hair and scalp.
3. Examine hair for cleanliness, texture, distribution, and presence of lice or nits.

   NOTE: See Supplement 1 for material on head lice.
4. Examine scalp for dryness, redness, scaly areas, swelling, or any other lesions.
5. Check with patient for hair products and style desired.

Planning

6. Gather all equipment.
7. Adjust bed to convenient working height, if patient will remain in bed.

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

8. Assist patient to sitting position, if allowed.

9. Drape towel over shoulder of patient in upright position or place over pillow of patient lying down.

Implementation

10. Divide hair into two or more sections for combing.

11. Turn or instruct patient to turn head to side if lying down to have more complete access to one side of hair at a time.

12. Comb from scalp to hair ends.

13. Hold tangled hair near scalp to prevent pulling and gently comb out tangles.

    NOTE: A small amount of alcohol placed on the hair may help loosen tangles.

14. Brush hair if desired.

15. Repeat for opposite side.

16. Arrange hair into style desired.

    NOTE: Long hair may be braided to prevent tangling.

17. Apply any hair care products desired by patient.

18. Carefully remove towel from shoulders or pillow to prevent dropping loose hair over bed and patient.

Evaluation

19. Evaluate using the following criteria

    a. Hair is neat and clean and free of tangles.

    b. Area is free of loose hair and hair care items are put away.

Documentation

20. Record and report

    a. Any scalp lesions; changes in hair growth, texture, or distribution, or presence of head lice.

PROVIDE PERSONAL CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues:
  - Discuss health conditions that can alter personal care routines.
  - Discuss health conditions that can be identified during the personal care routine.
  - Discuss ways in which personal care can improve health conditions.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions for a procedure and review them as needed.

  - Say the directions and have them repeat them back to you.

  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty developing esteem in self/others:

  - Discuss the importance of treating the patient with dignity.

  - Discuss the importance of esteem in all areas of life.

  - Review communication and interpersonal or relating skills.

- If students have difficulty applying safety practices/procedures:

  - Discuss the reasons for, and importance of, safety practices.

  - Review the safety procedures relevant to the specific task.

- If students have difficulty practicing good work habits/attitudes:

  - Encourage them to become familiar with the entire procedure before they begin the work.

  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.

  - Discuss what behaviors constitute good work habits.

  - Make sure the student knows what is expected of him or her.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

OBJECTIVE 5e

Shampoo hair.

INTRODUCTION

Shampooing the hair helps in maintaining clean, healthy hair and scalp. Most people feel better when their hair is clean. The shampooing method depends on the illness, the equipment, and the facilities present in the health care setting. There may be a sink placed so that a patient on a stretcher may receive a shampoo or a shampoo trough may be available for bed shampoos. Shampoos which require no water and no rinsing are also available.

NOTE: Read Supplement 2 on hair care before carrying out a shampoo.

EQUIPMENT AND SUPPLIES

- Shampoo
- Towels
- Shampoo board or trough for bed shampoo

  NOTE: One can be improvised by using a bath blanket or sheet rolled and arranged in a U-shape and placed inside a large plastic bag such as those used for large trash container.

- Bucket or basin and pitcher for use with shampoo board or trough
- Bath basin, if patient can sit up and shampoo hair in bed
- Other hair-care products desired by patient
- Hair dryer, if available
- Comb

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Assessment and Analysis

1. Determine patient's need for assistance.
2. Determine patient's ability to assume various positions.
3. Note any diagnoses relating to the hair or scalp.
4. Check for doctor's order allowing shampoo, if required by facility.
5. Check with patient about hair-care products to be used.

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

Planning

6. Gather all equipment.

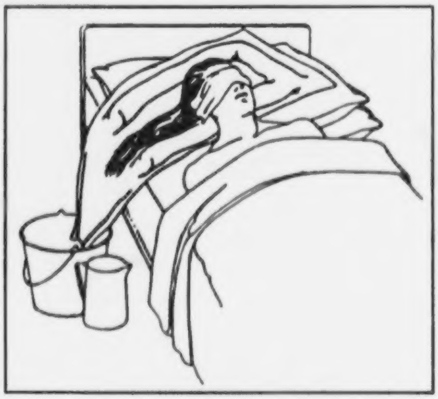
7. Obtain wheelchair or stretcher if patient is to be transported to a sink for hair washing.

8. Position patient appropriately for type of shampoo and facilities available.

   a. If shampoo will be given in bed, raise bed to comfortable working height.

   b. For a bed shampoo, place shampoo trough under patient's head and position drain portion in basin or bucket on a chair or floor.

Figure 1 Shampoo Trough*



9. For a bed shampoo, place bath blanket or towels under patient's shoulders.

10. Assist patient to sitting position and place basin on overbed table, if patient can tolerate shampoo in this manner.

11. Place towel over patient's chest for bed shampoo or over shoulders if sitting up.

---

*Source: Reprinted with permission from Nurses Reference Library, *Procedures*, Copyright 1983 Springhouse Corporation. All rights reserved.

12. Prepare water at a comfortably warm temperature for a bed shampoo or have water running at a comfortably warm temperature, if at a sink.

CAUTION!

DISORIENTATION POSSIBLE. Dizziness or disorientation can be caused by hot water increasing flow of blood to head. Check temperature by running water over wrist before applying to head.

Implementation

13. Pour water over hair to wet thoroughly or immerse hair in water. Be careful not to get water into eyes or ears.

14. Apply shampoo to hair.

15. Work the shampoo into a lather.

16. Rinse the hair thoroughly.

    NOTE: A second shampoo application and rinse may be carried out.

17. Place dry towel over hair to remove moisture.

18. Remove shampoo trough, if used.

19. Dry hair with towels.

20. Comb hair, taking care not to pull when straightening tangles.

21. Blow hair dry, if dryer is available and desired.

22. Apply any hair products desired and style appropriately.

23. Remove any wet towels, bed linen, or gowns and provide dry replacements.

    NOTE: For no-rinse shampoo products, the product is usually applied to dry hair and worked into a lather. The hair is then toweled thoroughly and styled as desired. Read the label for the exact steps for each product.

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Evaluation

24. Evaluate using the following criteria
    a. Hair and scalp is free of lesions, head lice, or abnormal growth or distribution patterns.
    b. Hair is clean and neatly styled.
    c. Patient is warm and dry including linens and gowns.
    d. All items used for shampoo and styling are replaced.

Documentation

25. Record and report any lesions of the scalp, abnormalities of hair growth or distribution or head lice.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients

- If students have difficulty interpreting graphics and symbols:
  - Have them examine the graphics or symbols to determine which elements are represented.
  - Instruct them to relate graphics and symbols to the information in the text.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Job Sheet 1.

JOB SHEET 6 — PROVIDE PERSONAL CARE — VII

OBJECTIVE 5f

Shave a patient.

INTRODUCTION

Male patients who are accustomed to being clean-shaven will look and feel better when someone provides this care for them when they are unable to do it for themselves. Nurses, especially female nurses, are sometimes reluctant to shave male patients. They may be afraid of cutting the patient or of doing a poor job. The pleasure and gratitude of patient and family once the job is completed make the effort worthwhile.

EQUIPMENT AND SUPPLIES

With electric razor

- Electric razor

  NOTE: Some facilities will require that the razor be checked for electrical hazards before use.

- Pre-shave and after-shave (Optional)

With safety razor

- Safety razor

  NOTE: This should be the patient's own or a disposable razor. Razors should never be shared.

- Basin of very warm water
- Shaving cream or soap
- Wash cloth and towel
- After-shave lotion (Optional)
- Clean gloves, if desired or specified by agency

PROCEDURE

__Functional Reading Skills__
- Interpret forms and records
- Follow written instructions

Assessment and Analysis

1. Assess patient's need for assistance.

2. Note any bleeding tendency or medications which would slow clotting.

- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/ patients

General Relating Skills
- Interact with clients/ customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

CAUTION!

BLOOD LOSS POSSIBLE. Excessive blood loss can occur from shaving cuts if patient has bleeding tendencies or is taking medication to slow clotting. Use only electric razor to shave patients if these indications are present.

---

3. Examine face for any skin lesions (moles, warts, reddened areas, etc.) which would alter shaving technique.

4. Observe patient's preference for facial grooming, such as a beard or mustache.

Planning

5. Identify patient and explain procedure.

6. Provide privacy.

7. Wash hands.

8. Gather equipment.

9. Provide adequate lighting.

10. Raise bed to Fowler's position, if not contraindicated.

11. Place towel over chest to protect gown and linens.

Implementation

12. Shave patient with electric or safety razor.

    For electric razor

    a. Apply pre-shave.

    b. Plug in or remove from charging unit and turn on.

    c. Pull skin taut with fingers of non-dominant hand and hold razor in dominant hand.

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Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/ patients

d. Use short up-and-down strokes when using a razor with a flexible or flat head and circular motions when using a razor with a circular head.

e. Start with cheeks, proceed to area around mouth, and shave the neck last.

For safety razor

a. Apply gloves if indicated or desired.

b. Pat very warm water on patient's face.

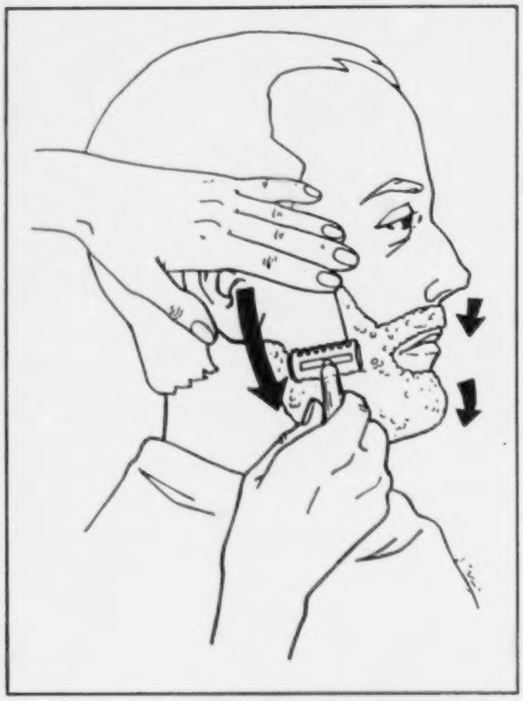
NOTE: The warm water will help to soften the beard.

c. Apply a generous amount of soap or shaving cream.

d. Pull skin taut with fingers of non-dominant hand and hold razor in dominant hand.

e. Use long downward strokes over the cheeks and shorter strokes around the mouth.

Figure 2*



f. Rinse the razor after each stroke.

g. Avoid any growths such as warts or moles.

h. Wash shaved area to remove any soap or shaving cream remaining.

i. Remove gloves without contaminating self.

13. Apply after-shave, if desired.

14. Reposition patient comfortably.

15. Clean and replace equipment.

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*Reproduced by permission from Hogan/Sorrentino; *Textbook for Long-Term Care Assistants*, St. Louis, 1988, The C.V. Mosby Company.

Evaluation

16. Evaluate using following criteria

    a. Face should be free of hair.

    b. There should be no nicks or abrasions.

Documentation

17. Record and report.

    a. Any abnormalities noted during shaving.

    b. Any problems such as nicks or abrasions which occurred as a result of shaving.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- If students have difficulty interpreting graphics and symbols:
  - Have them examine the graphics or symbols to determine which elements are represented.
  - Instruct them to relate graphics and symbols to the information in the text.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Job Sheet 1.

JOB SHEET 7

PROVIDE PERSONAL CARE

VII

OBJECTIVE 5g

Provide nail care.

INTRODUCTION

The nails are extensions of the skin. They must be kept clean as a part of personal hygiene. Cutting nails is not permitted in some health care facilities and in others is permitted only with a doctor's order. The nurse must be aware of agency policy regarding nail care.

Neat, well-groomed nails add to people's appearance and thus to their self-esteem. Well-groomed nails can also prevent further problems such as ingrown nails or scratches caused by jagged nails.

The ideal time to carry out nail care is following the bath when hands and feet have been in water. The tissues are softer and easier to work with. If nail care is to take place at another time, soaking the hands and/or feet should precede the care.

EQUIPMENT AND SUPPLIES

- Scissors and/or nail clippers
- Nail file or emery board
- Orange stick

  NOTE: These may not be available. A cotton-tipped swab is more frequently available and might be substituted.

- Lotion, if desired

  NOTE: If the hands and feet have not just been soaked in water during the bath, an emesis basin may be used to soak the fingers and a bath basin may be used to soak the feet. A towel will be necessary for drying.

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Assessment and Analysis

1. Assess the condition of the nails, noting dirty areas under the nails, hangnails, dry or cracked cuticles, broken nails, discolored or thickened nails, or ingrown toe nails.

2. Note any medical or nursing diagnoses involving the nails.

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3. Note any medical diagnoses which might make cutting the nails a more serious matter.

CAUTION!

INJURY POSSIBLE. Patients who have diabetes mellitus or circulatory problems could suffer serious consequences if a cut is inflicted on the skin during nail care. Check documentation carefully before providing nail care.

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions

Planning

4. Identify patient and explain procedure.
5. Provide privacy.
6. Gather equipment.
7. Provide adequate lighting.
8. Help patient assume a comfortable position.

Implementation

9. Soak fingernails and toenails, if at a time other than after the bath.
10. Using scissors or nail clippers, trim fingernails straight across even with or slightly longer than the fingertips.

CAUTION!

Agency policies vary regarding nail care for patients. Check agency policy before cutting nails.

- Communicate with clients/customers/patients

11. Use emery board or nail file to shape nails as desired.
12. Use orange stick or cotton tipped swabs to push back cuticle and clean under tips of nails.

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

13. Apply lotion, if desired, to help soften skin and cuticle.

14. Use nail clippers to trim toenails straight across, even with toes.

15. Use orange stick or cotton-tipped swabs to clean under nail, if needed.

16. Apply lotion, if desired, beginning at toes and working toward ankle to stimulate circulation.

17. Replace all equipment used.

Evaluation

18. Evaluate using following criteria

    a. Nails are clean and neatly trimmed with smooth edges.

    b. Skin around nails is soft and unbroken.

Documentation

19. Record and report presence of:

    a. Thickened or discolored nails.

    b. Inflamed areas around nails.

    c. Ingrown toenails.

    d. Lesions on the foot (corns, callouses, bunions, open areas).

PROVIDE PERSONAL CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 7

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues:
  - Discuss health conditions that can alter personal care routines.
  - Discuss health conditions that can be identified during the personal care routine.
  - Discuss ways in which personal care can improve health conditions.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions for a procedure and review them as needed.

- Say the directions and have them repeat them back to you.
- Emphasize the importance of practice in mastering this skill.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient with dignity.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal or relating skills.

- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.

- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors constitute good work habits.
  - Make sure the student knows what is expected of him or her.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

JOB SHEET 8 — PROVIDE PERSONAL CARE — VII

OBJECTIVE 5h

Administer a back rub.

INTRODUCTION

Skin care is an ever present concern of nurses and a good back rub is an important part of skin care. The lotion used adds moisture to the skin, the strokes both stimulate circulation and relax the muscles. It is a good time for the nurse to thoroughly inspect the back to detect any developing problems. Most patients can benefit physically and psychologically from a good back rub.

Back rubs are not given for patients who have back, rib or neck injuries or a surgical incision on the back. Patients who have high blood pressure or tachycardia may also have adverse effects from a back rub. Take care not to scratch patient with rings or long fingernails.

EQUIPMENT AND SUPPLIES

- Lotion

  NOTE: Alcohol is sometimes used but it has a drying effect on the skin which may not be desirable.

- Towel

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Determine patient's ability to turn to side or abdomen.
2. Check for medical or nursing diagnoses which would contraindicate a back rub or call for special attention.
3. Assess skin for reddened areas or breaks in the skin, especially over bony prominences.

Planning

4. Identify patient and explain procedure.
5. Wash hands.

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Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

6. Gather equipment.

   NOTE: Lotion may be warmed by letting it stand for a few minutes in a basin of warm water. This could be done while the back is washed as part of the bath.

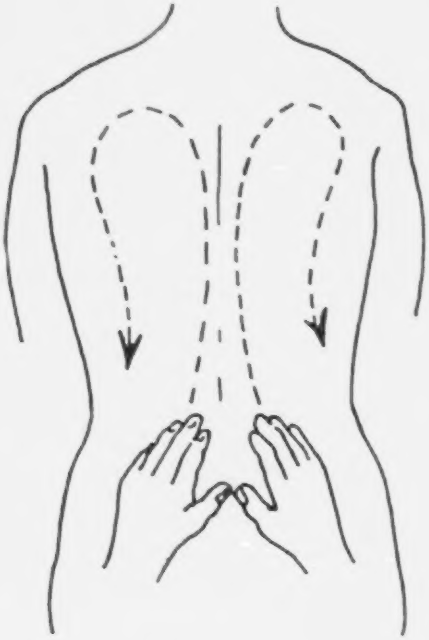
7. Provide privacy.

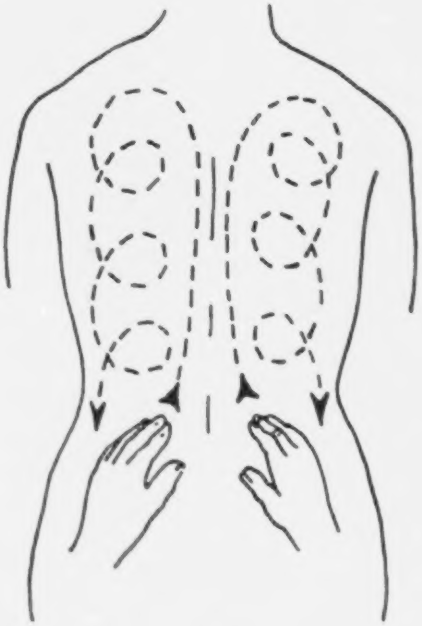
8. Position patient on side or abdomen.

   NOTE: The abdomen is preferable to make it easier to inspect and reach all areas of the back.

Implementation

9. Pour a small amount of lotion into palms of hands and hold palms together to warm lotion.





General Relating Skills
- Analyze/apply non-verbal communication
- Interacting with clients/customers/ patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients patients

10. Place hands side by side at base of spine and stroke slowly upward to shoulders. Move hands out on shoulders and back down to starting point. Repeat for several minutes.

11. Use circular strokes over all bony prominences.

    NOTE: Do not rub reddened areas which do not clear after pressure is removed.

12. Continue back rub for 4-6 minutes, reapplying lotion as needed.

13. Remove excess lotion by patting with towel.

14. Reposition patient comfortably and adjust gown and bedding.

15. Return all equipment to storage area.

Evaluation

16. Evaluate using the following criteria

    a. Patient is comfortable and relaxed.

    b. Back is free of all reddened areas and breaks in the skin.

Documentation

17. Record and report

    a. Any complaints of pain during back rub.

    b. Any reddened areas which do not clear when pressure is relieved, any breaks in the skin.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 8

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- If students have difficulty analyzing/applying non-verbal communication:
  - Discuss some ways in which patients reveal information non-verbally.

    EXAMPLE: Facial expressions, Tone of voice, Movements, Body position, Mannerisms

  - Discuss some ways in which the student can convey information non-verbally.

    EXAMPLE: The student can convey concern for the comfort and self-esteem of the patient by providing privacy during the procedure.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Job Sheets 1 and 5.

JOB SHEET 9

PROVIDE PERSONAL CARE

VII

OBJECTIVE 5i

Dress a patient in a gown.

INTRODUCTION

Many patients need assistance in putting on and removing their hospital gowns. This is especially true when the patient has an IV line on one arm. The construction of the hospital gown with wide sleeves and an opening down the back simplifies the task somewhat. Some facilities even have gowns with snaps in place of the shoulder seam for use when an IV is in place. Since these are not in wide use, the nurse must learn to cope with the traditional gown.

EQUIPMENT AND SUPPLIES

- Clean gown

Assessment and Analysis

1. Determine the patient's ability to help.
2. Determine which arm has the IV line.
3. Decide whether the diameter of the IV solution container is less than the diameter of the gown sleeve.

   NOTE: Most IV solutions are in 250 ml, 500 ml or 1000 ml containers. All will fit through the sleeve of an adult gown. Occasionally a special mixture will be packaged in a larger container which probably would not fit.

4. Determine whether or not the IV is being delivered by a pump.

Planning

5. Wash hands.
6. Obtain clean gown.
7. Provide privacy.
8. Untie gown.

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

Implementation

9. Remove sleeve from arm without IV and cover patient with sheet or bath blanket.

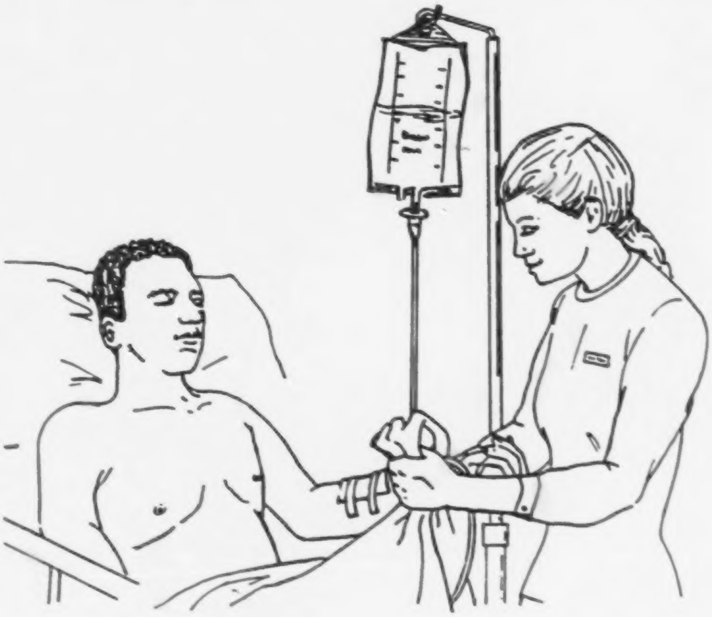
10. If IV is being delivered by pump, follow manufacturer's directions for removing IV from pump.

CAUTION!

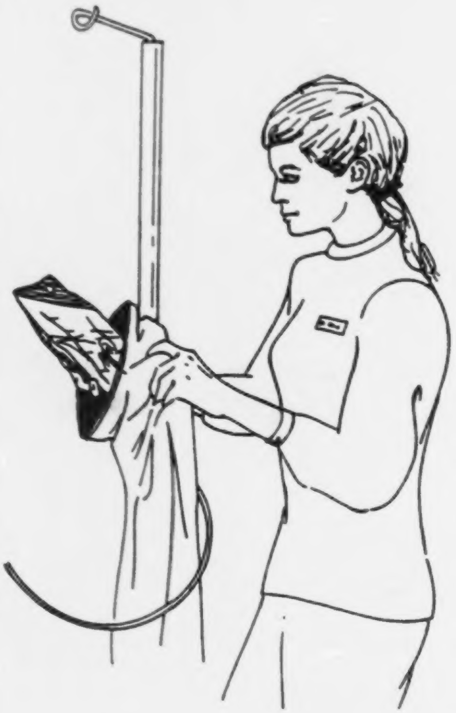
INJURY POSSIBLE. Too rapid administration of fluid can occur when tubing is free of pump. Adjust roller clamp to KVO (keep vein open) rate during gown change.

Adjust roller clamp to KVO rate during gown change.

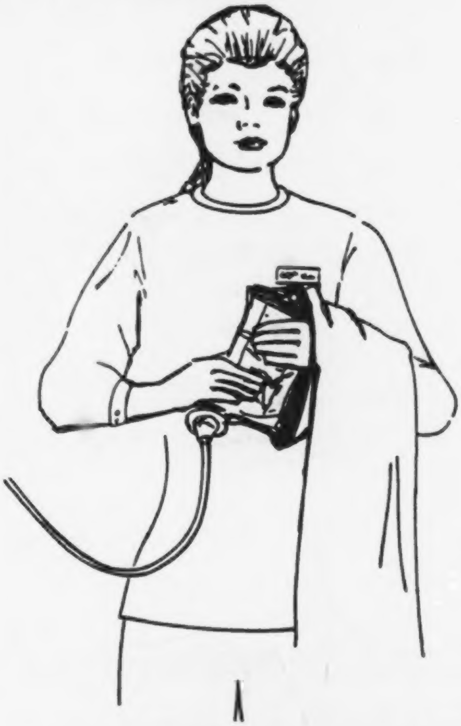
11. Pull gown sleeve over arm with IV line and up tubing toward IV solution container.



12. Remove IV solution container from pole and slip gown over container keeping container elevated above IV site.



13. Place IV container through sleeve of clean gown and replace solution on pole.



14. Continue pulling sleeve over tubing and patient's arm.

CAUTION!

INFECTION POSSIBLE. The chance for introducing pathogens directly into the blood stream is increased when the tubing is broken at a connection. Avoid breaking the connection to change the patient's gown.

15. If IV is being delivered by pump, reactivate the pump according to manufacturer's directions. Open the roller clamp.

16. Place the sleeve of the gown over the arm without the IV.

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17. Adjust gown and tie.

    NOTE: If restraints have been in use, replace them.

18. Dispose of gown in appropriate place.

19. Wash hands.

Evaluation

20. Evaluate according to following criteria:

    a. Gown is clean and appropriately arranged and secured.

    b. IV solution and line are intact with the solution dripping at the correct rate.

Documentation

21. Record and report any pertinent observations of the IV site such as redness, swelling, leakage of solution, and action taken in regard to findings.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 9

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

— Mastering specific job task/procedure

— Applying safety practices/procedures

— Practicing good work habits/attitudes

— Dealing effectively with customers/clients/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, and Job Sheets 1 and 5.

JOB SHEET 10

PROVIDE PERSONAL CARE

VII

OBJECTIVE 5j

Provide catheter care.

INTRODUCTION

The type of catheter which stays in place may be called a retention, Foley, or indwelling catheter. There is an increased risk of infection when this type of catheter is used. The risk can be minimized with thorough cleaning at the point of the urinary meatus. This procedure should be completed when the patient is bathed and any time the perineal area becomes soiled. Agency policy may indicate the frequency expected in relation to catheter care.

EQUIPMENT AND SUPPLIES

- Basin of clean, warm water

  NOTE: If catheter care is completed as a part of the bath, water should be changed immediately before the catheter care.

- Clean wash cloths
- Towel
- Disposable underpads
- Clean gloves

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Note any evidence of drainage around the urinary meatus.
2. Assess urinary drainage.
3. Check female patient's ability to maintain necessary position without assistance.

Planning

4. Identify patient and explain procedure.
5. Provide privacy.
6. Obtain supplies.
7. Apply clean gloves.

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Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

8. Expose perineal area.

    a. For male:

        Fold covers back over thighs.

    b. For female:

        Assist patient to bend knees and separate legs to expose perineal area.

9. Place disposable underpad under patient's hips.

10. Assure that there is no tension being placed on catheter.

Implementation

11. Apply soap and water to clean wash cloth.

12. For male:

    a. Gently grasp penis with non-dominant hand.

    b. Gently retract foreskin if uncircumcised.

    c. Wash skin around catheter using a circular motion with washcloth touching skin and catheter.

    d. Rinse skin thoroughly.

    e. Clean the catheter with a clean washcloth, soap, and water, starting at the urinary meatus down about four inches.

    f. Gently pat the area dry and replace foreskin.

13. For female:

    a. Separate labia with non-dominant hand.

    b. Wash skin around catheter using a downward motion first on the far side of the catheter and then on the near side.

    c. Use a clean portion of the washcloth for each stroke.

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   d. Rinse area thoroughly.

   e. Clean the catheter with a clean washcloth, soap, and water, starting at the urinary meatus down about four inches.

   f. Pat the area dry.

14. Make sure entire perineal area is clean and dry.

15. Clean and replace equipment.

16. Dispose of gloves without contaminating self.

17. Wash hands.

18. Assist patient to assume comfortable position and replace covers.

Evaluation

19. Evaluate using the following criteria

   a. Skin around urinary meatus is clean and free of any drainage.

   b. Patient offers no complaints about positioning of catheter and tubing.

Documentation

20. Record and report procedure according to agency policy.

   a. Record the presence of any drainage around the urinary meatus.

   b. Record any unusual appearance of urinary drainage in tubing.

   c. Record any complaints of the patient relating to the catheter.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 10

Skill development for: READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Job Sheet 1.

OBJECTIVE 5k

Care for a patient with a catheter before and after a tub bath.

INTRODUCTION

Most patients who have an indwelling catheter will be more comfortable if the catheter is secured to stabilize the catheter and prevent tension on the catheter. If tape is used, it will have to be replaced if it becomes wet.

Patients who have a catheter for a long period of time may still wish to take a tub bath. A catheter plug may be used to make the process easier. It is generally considered to be wiser to keep the catheter line intact to reduce the risk of introducing infection. Therefore, when a plug is used, it must be done using aseptic technique.

EQUIPMENT AND SUPPLIES

- Tape or commercially prepared leg strap
- Catheter clamp

  NOTE: A rubber band will serve as a clamp if no others are available.

- Sterile catheter plug
- Antiseptic swabs
- Clean gloves

PROCEDURE

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Note any evidence of drainage around the urinary meatus.

2. Check for allergy to tape.

Planning

3. Identify patient and explain procedure.

4. Gather supplies.

5. Provide privacy.

6. Apply clean gloves.

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Implementation

TO DISCONNECT CATHETER

7. Clamp catheter.
8. Use an antiseptic swab to swab site where catheter is connected to tubing.
9. Disconnect catheter and tubing, but do not let the ends touch anything.
10. Place the catheter plug in the catheter and put the protector over the drainage tubing without touching the narrow part of the plug or the inside of the protector.
11. Unclamp catheter.
12. Remove gloves without contaminating self and wash hands.

    NOTE: Patient may now ambulate more freely or take a tub or shower bath.

TO RECONNECT

13. Apply clean gloves.
14. Clamp catheter.
15. Remove catheter plug and protector without touching tip of either catheter or tubing. Dispose of plug.
16. Reconnect the catheter to drainage tubing.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

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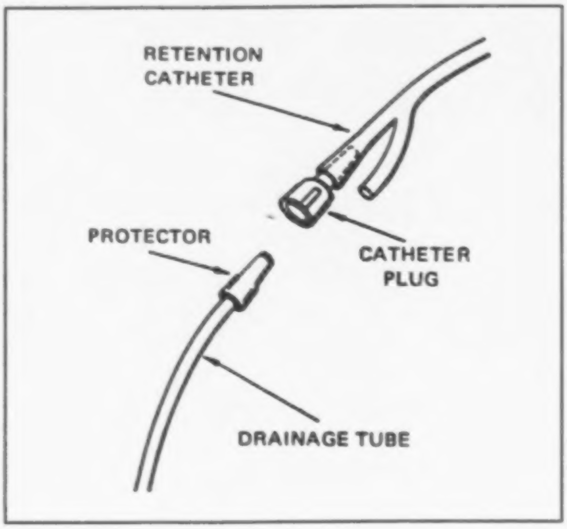
Figure 5 Connection Site*



17. Use an antiseptic swab to swab site where tubes are connected.

18. Unclamp catheter.

19. Remove gloves without contaminating self and wash hands.

TO SECURE CATHETER

20. Check to see that site where tape will be applied (upper thigh for male or female or abdomen for male) is clean and dry.

21. Cut tape approximately 4 inches long.

22. Secure catheter to desired site with tape, or special leg strap.

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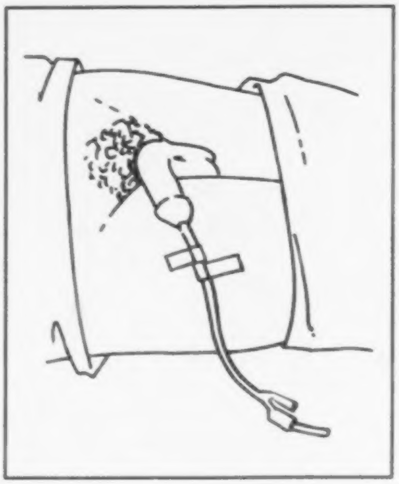
Figure 6



Evaluation

23. Evaluate using the following criteria.

    a. Tape or strap is secure without unnecessary tension on catheter.

    b. Urine is draining freely.

Documentation

24. Record and report

    a. Any evidence of drainage around the urinary meatus.

    b. Any abnormalities in urinary drainage.

    c. Any complaints of the patient in relation to the catheter.

PROVIDE PERSONAL CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 11

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Give/follow oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, and Job Sheets 1 and 5.

JOB SHEET 12 — PROVIDE PERSONAL CARE — VII

OBJECTIVE 5I

Provide care for the incontinent patient.

INTRODUCTION

The patient who is incontinent of bowel or bladder presents a real nursing challenge. Moisture, and especially urine because of its chemical composition, left in contact with the skin causes skin breakdown. In addition to the possibility of irritating the skin, feces contains organisms which could invade surrounding tissue and cause infections to develop. Both urine and feces present an objectionable odor when allowed to remain on the body.

Frequent checks and thorough cleansing of the incontinent patient will keep problems from developing. Disposable water-proof underpads or adult diapers may be used to minimize the amount of bed linen which must be changed. However, a dry bed is not enough. Our goal is to keep the **patient** dry and these items should not be used to avoid checking the patient.

EQUIPMENT AND SUPPLIES

- Basin of warm water
- Soap
- Toilet tissue
- Washcloths
- Towel
- Lotion
- Adult diaper (if desired)
- Disposable underpad (if desired)
- Linen as needed
- Gown, if needed
- Clean gloves

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Determine what fresh linen is needed.
2. Check to see if a diaper is in use or needed and determine appropriate size.

   NOTE: Diapers usually come in small, medium, large, and extra large sizes. Be sure to choose one big enough.

3. Determine patient's ability to turn and assist in procedure.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

Planning

4. Identify patient and explain procedure.
5. Obtain supplies.
6. Provide privacy.
7. Apply clean gloves.

Implementation

8. Unfasten diaper, if one is in place. Fold soiled areas inward and tuck between legs.
9. Have patient separate legs and bend knees.
10. Remove any visible fecal material with toilet tissue, then bathe area with soap and water, rinsing thoroughly.

    NOTE: Perform catheter care if indicated

    For the male patient

    a. Cleanse the area around the urinary meatus first, using a circular motion.
    b. Wash the penis from the meatus toward the body.
    c. Gently cleanse the scrotum.
    d. Cleanse anterior thighs and surrounding area as needed.

    For the female patient

    a. Separate labia and cleanse, using downward strokes and separate area of washcloth for each stroke.
    b. Wash outward from perineum.
    c. Cleanse anterior thighs and surrounding area as needed.

11. Dry area thoroughly.
12. Assist patient to turn to side.

13. Fold soiled diaper and/or underpad under patient, keeping soiled area inside away from patient.

14. Loosen soiled drawsheet and fold toward patient keeping soiled part inside away from patient.

15. Remove any feces from anal area with tissue.

16. Cleanse anal area with soap and water, rinsing thoroughly.

    NOTE: Strokes should be toward back or away from perineal area.

17. Wash buttocks and posterior thighs as needed.

18. Dry area thoroughly.

19. Apply lotion to buttocks by massaging in circular motion to stimulate circulation, paying special attention to coccyx and other bony prominences.

20. Place clean drawsheet on bed.

21. Place clean disposable underpad in place.

22. Apply clean diaper by placing inside surface of diaper back against patient and tuck front of diaper between legs.

23. Assist patient to turn to opposite side.

24. Check to see that no wet or soiled areas remain on surfaces where patient was lying during cleansing. Cleanse if needed.

25. Remove gloves, being careful not to contaminate self.

26. Pull drawsheet, disposable underpad, and diaper into place, tuck sheet securely.

27. Assist patient on to back and secure tapes on diaper.

28. Replace gown, if necessary.

29. Straighten or replace top covers.

30. Position patient comfortably.

31. Replace equipment, discarding soiled underpad and diaper in plastic-lined trash container.

    NOTE: They should be removed from the patient's room to prevent odor and the growth of pathogens.

32. Discard soiled linen.

33. Wash hands.

Evaluation

34. Evaluate using the following criteria
    a. Patient is clean and dry.
    b. Linens are clean and dry.
    c. There is no odor of urine or feces remaining.

Documentation

35. Record and report
    a. Urination or bowel movement according to agency policy.
    b. Any unusual characteristics of feces or urine such as amount, strong odor, presence of blood, or other foreign material or altered consistency of feces such as liquid or constipated stool.
    c. Any reddened or broken areas on the surface of the skin.

PROVIDE PERSONAL CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 12

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Job Sheet 1.

JOB SHEET 13

PROVIDE PERSONAL CARE

VII

OBJECTIVE 5m

Assist with a tub bath or shower.

INTRODUCTION

Most hospitalized patients or residents of long-term care facilities would prefer a tub or shower bath over a bed bath if their condition permits such a choice. Often this type of bath symbolizes recovery and independence. It offers more opportunity for movement and exercise. Most people also feel cleaner after this type of bath.

Since there is more movement involved, safety is an important consideration. The patient must have some degree of stability for safety. The nurse must take action to assure that the patient does not fall. Falls would also make asphyxiation a safety consideration.

Running water or immersion in water makes water temperature another important safety consideration. Serious burns can occur if the water temperature is not closely monitored.

EQUIPMENT AND SUPPLIES

- Wash cloths
- Soap
- Towels
- Bath mat
- Non-skid bath mat for use in tub or shower
- Clean gown
- Robe and slippers, especially if patient will leave his room to reach the shower or tub
- Shower cap, if desired
- Lotion and deodorant as desired by patient
- Shower chair, if indicated

NOTE: These are usually available in long-term care facilities.

- Stool or chair
- Disinfectant for cleaning shower or tub
- Bath thermometer (If available)
- Privacy sign for bathroom door
- Clean gloves, if desired or specified by agency

PROCEDURE

Assessment and Analysis

1. Determine patient's need for assistance.

2. Examine skin for any bruises, rashes, reddened areas, breaks in the skin, or changes in color.

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures

3. Check for any reduction in sensation that would alter ability to feel water temperature.

4. Check for any dressings, incisions, or catheters which would need attention before bathing.

   NOTE: Their presence might contraindicate a tub bath or shower or make a doctor's order necessary. Protective coverings such as plastic wrap might be applied over dressings. See procedure on inserting a catheter plug.

5. Note any medical or nursing diagnoses relative to bathing or skin care.

Planning

6. Identify patient and explain procedure.

7. Prepare any areas such as dressings or catheters.

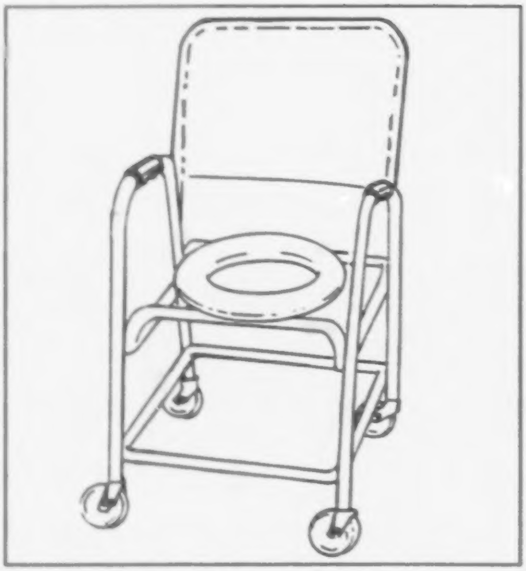
8. Gather all equipment.

9. Obtain wheelchair for transporting patient, if necessary.

   NOTE: Some shower chairs may be used for transporting.

- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

Figure 7 Shower Chair



10. Check shower or tub area for warmth.

11. Clean area with disinfectant used by agency.

12. Fill tub 1/3 to 1/2 full of water at 95-105 degrees F. (35-39.3 degrees C.) or adjust shower flow.

CAUTION!

BURN POSSIBLE. Temperatures greater than 105° can cause burns. Ensure water temperature is below 105°.

13. Place bath mats in position.

14. Place bath sign on door to assure privacy for patient.

Implementation

15. Assist or transport patient to shower.

16. If patient will remain alone in tub or shower, point out call light and caution patient not to lock doors.

17. Assist to remove gown, robe, and slippers.

18. Re-check water temperature.

    NOTE: This will ensure that the temperature has not cooled too much and that additional hot water has not been added.

19. Assist patient into tub or shower, encouraging patient to use any assistive devices such as grab bars for safety.

20. Assist in bathing as necessary.

    NOTE: Many patients can use assistance with their back and legs.

21. If patient can remain alone, check frequently.

    NOTE: Bed could be made and unit cared for at this time.

22. Place opened bath blanket on stool or chair.

23. Turn off shower or allow water to drain from tub.

24. Assist patient out of tub or shower.

25. Seat patient on stool or chair and wrap bath blanket around patient.

26. Dry patient from head to toe, using bath blanket to cover areas not being dried.

27. Assist patient in applying deodorant and lotion as desired.

28. Assist patient to dress

29. Assist or transport patient back to bed and make comfortable

30. Remove all soiled towels and washcloths from tub or shower area.

31. Clean tub or shower (and shower chair, if used) with disinfectant.

Evaluation

32. Evaluate using the following criteria

    a. Skin is clean, dry, and free of drainage or odor.

    b. There are no areas of redness which would indicate a burn.

    c. Patient feels relaxed and comfortable.

Documentation

33. Record and report:

    a. Completion of tub or shower bath according to agency policy.

    b. Any reddened areas, breaks in skin, bruises, rashes, or other changes in the skin.

    c. Any difficulty in movement, weakness, dizziness, shortness of breath, or other symptom experienced by the patient.

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PROVIDE PERSONAL CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 13

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues:
  - Discuss health conditions that can alter personal care routines.
  - Discuss health conditions that can be identified during the personal care routine.
  - Discuss ways in which personal care can improve health conditions.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions for a procedure and review them as needed.

  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient with dignity.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal or relating skills.

- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.

- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors constitute good work habits.
  - Make sure the student knows what is expected of him or her.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

JOB
SHEET 14

PROVIDE PERSONAL CARE

VII

OBJECTIVE 5n

Give a complete bed bath.

INTRODUCTION

Many patients depend upon the nurse for total care including bathing. Giving a complete bed bath correctly can make the experience easier and more pleasant for both nurse and patient.

The nurse should keep the patient safe and comfortable physically and psychologically. This means that the nurse will take pains to provide privacy and warmth by using the bath blanket and towel throughout the bath. The towel is kept next to or under the part being bathed to be readily available to dry the patient thoroughly as well as to keep the bed from becoming wet. When the nurse leaves the beside to obtain clean water the side rails must be raised and the bed placed in the low position. Restraints may need to be reapplied.

A thorough bath, skillfully given, will make the patient feel better and prevent complications.

EQUIPMENT AND SUPPLIES

- Bath basin with water (105-115 degrees F.)
- Soap and soap dish
- Wash cloths
- Towels
- Clean gown
- Bath blanket
- Linens for changing bed
- Lotion
- Other toilet articles as indicated
- Bath thermometer
- Privacy sign for door
- Clean gloves, if desired or required by agency

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Assessment and Analysis

1. Determine patient's need for assistance.
2. Examine skin for any bruises, rashes, reddened areas, breaks in the skin, or changes in color.
3. Note any medical or nursing diagnoses relative to bathing or skin care.

- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

4. Check for any areas which should not become wet, such as dressings or casts.

Planning

5. Identify patient and explain procedure.

6. Gather all equipment.

7. Check room for warmth.

   NOTE: A room temperature between 75-80 degrees will be comfortable. When skin is wet, the patient can quickly become chilled. Providing a warm environment may involve turning up heat, turning off air conditioning or fans, or closing doors and windows.

8. Place bath sign on door.

9. Wash hands.

10. Remove bedspread.

11. Place bath blanket over top sheet.

    NOTE: Have patient hold on to it or tuck top edge under patient's shoulders.

12. Carefully pull top sheet to foot of bed and remove.

13. Offer bedpan or urinal.

    NOTE: This may save time and effort later. The sound of water running and the sensation of water on the skin may stimulate the urge to void.

14. Wash hands.

Implementation

15. Assist patient in completing oral hygiene.

    NOTE: This may be completed after bath, if patient desires.

16. Remove patient's gown.

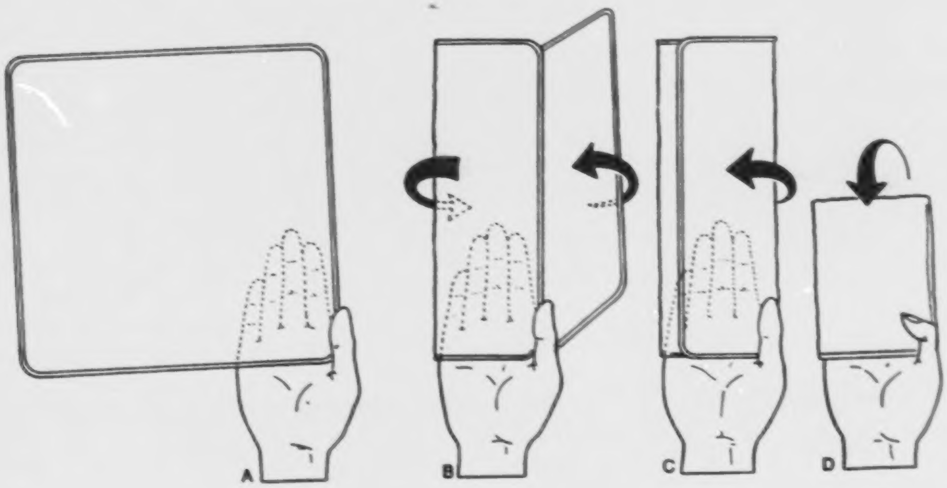
17. Put on gloves, if desired or required.

18. Wash the face, ears, and neck.

    a. Place towel over chest.

    b. Make a mitt by folding washcloth around hand.

    Figure 8*



    c. Wash the eyes, using water only. Use one corner of the mitt to wipe from the nose to the outer corner of the eye and the opposite corner in the same manner for the other eye.

    d. Pat the eyes dry.

    e. Ask if the patient wants soap used on the face; use soap for all other areas.

    f. Wash the face, neck, and ears.

    NOTE: Do not neglect the area behind the ears.

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g. Dry area thoroughly.

NOTE: The patient who can assist may enjoy washing his own face.

19. Wash the arms and hands.

a. Place the towel under the far arm.

NOTE: Washing the farthest extremities first prevents any drips over a clean area.

b. Wash the arm with long, smooth, but firm strokes from the wrist toward the shoulder to stimulate circulation. Rinse well.

c. Wash axilla thoroughly. Rinse well.

d. Dry by wrapping towel around arm and patting.

e. Place towel under hand and place wash basin on towel.

f. Place hand in water and wash thoroughly.

g. Remove basin and dry hand.

h. Repeat procedure for other arm.

NOTE: The patient who can assist may enjoy being raised to a Fowler's position to place both hands in the bath basin placed on the overbed table.

20. Wash chest and abdomen

a. Place towel over chest and fold bath blanket back to waist.

b. Lift corner of towel to wash chest. Pay special attention to folds of skin beneath female breasts. Rinse well.

c. Dry thoroughly.

d. Turn towel lengthwise or use a second towel to cover the abdomen.

e. Pull the bath blanket to the pubic area.

f. Wash the abdomen and rinse well.

NOTE: Abdominal dressings are quite common. Dressings here or elsewhere on the body are **not** removed for bathing and they must be kept dry.

g. Dry thoroughly.

21. Wash the legs and feet.

    a. Place the towel under the far leg.

    b. Wash the leg using long, smooth, but firm strokes from the ankle to the hip to stimulate circulation. Rinse well.

    c. Dry by wrapping the towel around the leg and patting.

    NOTE: If the leg is very large it may be necessary to wash in two sections. One from the ankle to the knee and one from the knee to the hip.

    d. Place the towel under the foot and place the bath basin on it.

    e. Place the foot in the water giving support to the leg and wash the foot thoroughly.

    f. Remove basin and dry foot.

    g. Repeat procedure for other leg and foot.

22. Change bath water.

    NOTE: Change water any time it becomes cool, dirty, or soapy, but especially at this point.

23. Assist patient to turn to abdomen or side.

24. Place towel lengthwise along patient's back.

25. Wash back from waist to neck thoroughly.

26. Rinse well and dry thoroughly.

27. Repeat procedure for buttocks.

28. Provide a thorough back rub unless contraindicated.

29. Assist patient to turn to back.

30. Change bath water and obtain clean wash cloth.

31. Wash the perineal area.

Male patients

a. Arrange bath blanket to expose perineal area while still covering trunk and as much of legs as possible.

b. Place towel over upper legs.

c. Apply gloves.

d. Gently retract the foreskin if uncircumcised.

e. Cleanse the area around the urinary meatus first, using a circular motion and rinse thoroughly.

f. Gently replace the foreskin.

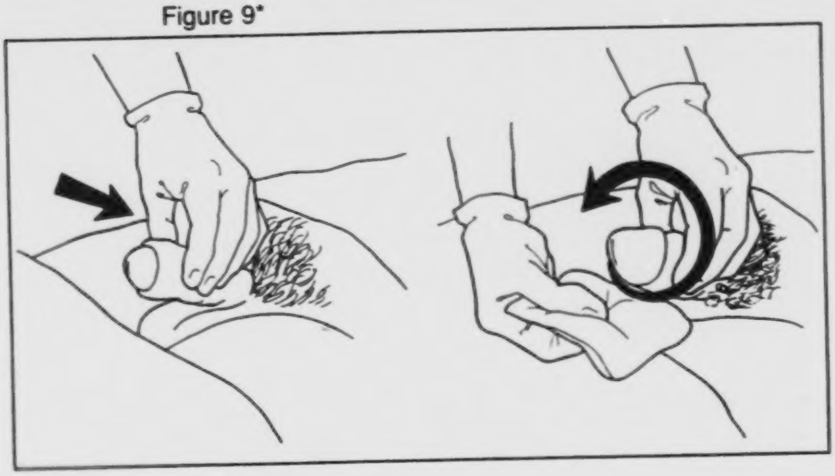
g. Wash the penis with strokes toward the trunk.

h. Rinse thoroughly.

i. Gently cleanse the scrotum and rinse.

j. Dry area thoroughly, but gently.

Figure 9*



Female patients

a. Have patient separate legs and bend knees.

b. Place towel on bed between legs.

c. Apply gloves.

d. Separate labia and cleanse area over meatus first, using downward strokes.

e. Using separate areas of wash cloth, repeat downward strokes first on far side and then on near side.

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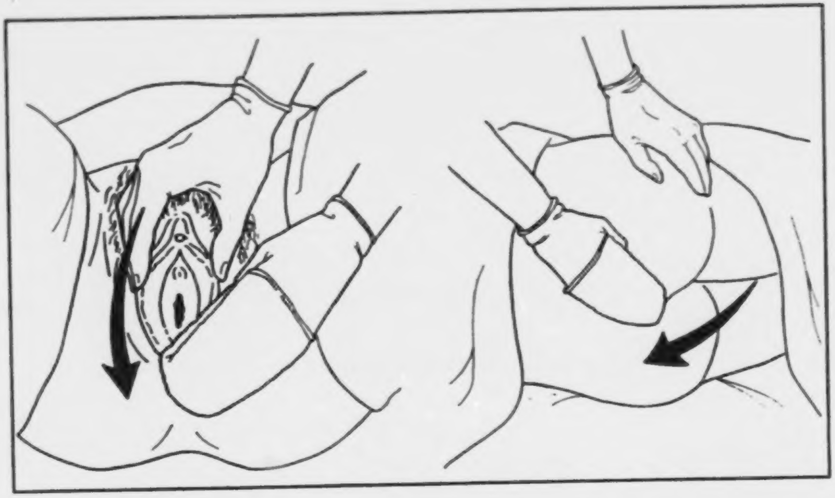
f. Rinse area thoroughly.

g. Dry by patting gently.

Figure 10*



NOTE: The patient who can assist can complete perineal care when placed in a Fowler's position with the basin, soap, and a clean wash cloth placed on the overbed table.

32. Remove gloves without contaminating self.

33. Assist patient to apply lotion or other products as desired.

34. Replace patient's gown.

35. Empty bath basin and replace.

36. Assist patient with hair care, shaving or applying make-up as needed.

37. Change bed linens.

38. Damp dust and straighten unit.

39. Return bed to lowest level.

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40. Place call light and all necessary items within patient's reach.

41. Remove bath signs from door.

Evaluation

42. Evaluate using the following criteria

    a. Patient is clean and free of redness, bruises, rashes, or other lesions.

    b. Skin is intact and free of redness, bruises, rashes, or other lesions.

    c. Patient is relaxed and comfortable.

    d. Unit is neat and clean.

Documentation

43. Record and report:

    a. Completion of bed bath according to agency policy.

    b. Any reddened areas, breaks in the skin, bruises, rashes, or other changes in the skin.

    c. Any difficulty in movement, weakness, shortness of breath, or other symptom experienced by the patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 14

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- — Interpreting forms and records
- — Following written instructions
- — Interpreting graphics and symbols

WRITING SKILLS

- — Completing forms and records

SCIENCE SKILLS

- — Investigating/applying principles of anatomy/physiology
- — Investigating health issues

ORAL COMMUNICATION SKILLS

- — Giving/following oral directions
- — Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- — Interacting with clients/customers/patients
- — Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- If students have difficulty interpreting graphics and symbols:
  - Have them examine the graphics or symbols to determine which elements are represented.
  - Instruct them to relate graphics and symbols to the information in the text.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Job Sheet 1.

OBJECTIVE 5o

Assist with a partial or self-help bath.

INTRODUCTION

There are times when the nurse does not need to bathe a patient completely. A good example would be a post-operative patient who is recovering and capable of completing some of his own care. It might still be difficult for this patient to reach his back, legs, and feet. The nurse could prepare the bath water and complete these areas and encourage the patient to bathe the rest of his body.

Elderly patients also benefit from a partial bath. Their skin dries out easily with bathing. Some of this dryness may be alleviated by alternating complete baths with partial baths. Areas in need of more frequent attention would probably include the face, hands, axillae, back, and perineal areas.

EQUIPMENT AND SUPPLIES

- Bath basin with water (105-115 degrees F.)
- Soap and soap dish
- Wash cloths
- Towels
- Clean gown
- Bath blanket
- Linens for changing bed
- Lotion
- Bath thermometer
- Privacy sign for door
- Clean gloves, if desired or required by agency

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Assessment and Analysis

1. Determine patient's need for assistance.

2. Examine skin for any bruises, rashes, reddened areas, breaks in the skin, or changes in color.

3. Note any medical or nursing diagnoses relative to bathing or skin care.

4. Check for any areas which should not become wet, such as dressings or casts.

Planning

5. Identify patient and explain procedure.

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Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/ patients

General Relating Skills
- Interact with clients/ customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/ patients

6. Gather all equipment.

7. Check room for warmth.

   NOTE: A room temperature between 75-80 degrees will be most comfortable. When skin is wet, the patient can quickly become chilled. Providing a warm environment may involve turning up heat, turning off air conditioning or fans, or closing doors and windows.

8. Place bath sign on door.

9. Wash hands.

10. Remove top covers and replace with bath blanket.

11. Offer bedpan or urinal.

12. Wash hands.

Implementation

13. Assist patient in completing oral hygiene.

    NOTE: This may be completed after bath if patient desires.

14. Bathe as required.

    Partial bath for dependent patient

    a. Raise bed to comfortable working height.

    b. Remove gown.

    c. Put on gloves, if desired or required by agency.

    d. Wash face and pat dry.

    e. Wash and dry axillary area.

    f. Place each hand in basin or water, wash and dry thoroughly.

    g. Assist patient to turn to side or abdomen.

    h. Wash and dry back.

i. Give back rub unless contraindicated.

j. Wash and dry perineal area, wearing gloves.

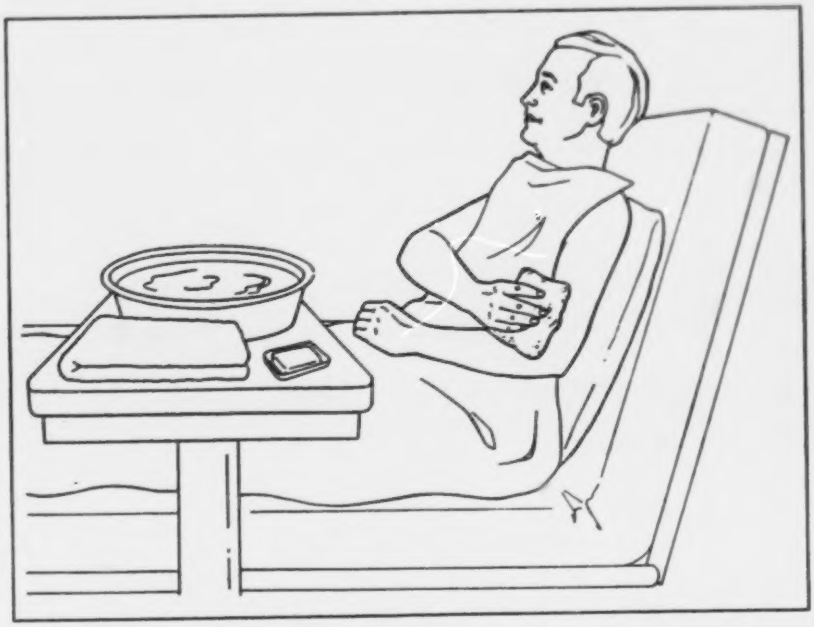
k. Replace gown.

Self-help bath for patient who can assist

a. Raise head of bed to Fowler's position.

b. Place basin of water on overbed table convenient for the patient to reach.

Figure 11*



c. Instruct patient to call when ready to have legs, feet, and back washed.

d. When patient calls, raise bed to comfortable working height.

e. Put on gloves, if desired or required by agency.

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   f. Wash legs and dry thoroughly.

   g. Place each foot in basin of water, wash and dry thoroughly.

   h. Change bath water.

   i. Assist patient to turn to back or side.

   j. Wash and dry back.

   k. Give back rub unless contraindicated.

   l. Give patient opportunity to bathe perineal area.

   m. Assist patient into clean gown.

15. Empty bath water, clean and dry basin.

16. Assist with hair care, shaving, or other care required.

17. Make bed, damp-dust and straighten unit.

18. Return bed to lowest level.

19. Place call light and all necessary items within reach of patient.

20. Remove bath sign from door.

Evaluation

21. Evaluate using the following criteria

   a. Patient is clean and dry without any odors.

   b. Skin is intact and free of redness, bruises, rashes, or other lesions.

   c. Unit is clean and neat with call light in place and bed at lowest level.

Documentation

22. Record and report:

   a. Completion of bath according to agency policy.

b. Presence of any reddened areas, breaks in the skin, bruises, rashes, or other changes in the skin.

c. Any difficulty in movement, weakness, shortness of breath, or other symptom experienced by the patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 15

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues:
  - Discuss health conditions that can alter personal care routines.
  - Discuss health conditions that can be identified during the personal care routine.
  - Discuss ways in which personal care can improve health conditions.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions for a procedure and review them as needed.

- Say the directions and have them repeat them back to you.
- Emphasize the importance of practice in mastering this skill.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient with dignity.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal or relating skills.

- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.

- If students have difficulty practicing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors constitute good work habits.
  - Make sure the student knows what is expected of him or her.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

PRACTICAL TEST 1

PROVIDE PERSONAL CARE

VII

JOB SHEET 1

Assist with brushing teeth.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's need for assistance.	_____	_____
2. Noted any medical or nursing diagnoses related to the oral cavity.	_____	_____
3. Noted the condition of the patient's lips, teeth, tongue, and gums.	_____	_____
4. Identified patient and explained procedure.	_____	_____
5. Provided privacy.	_____	_____
6. Washed hands.	_____	_____
7. Obtained all supplies needed and place on overbed table.	_____	_____
8. Raised patient to Fowler's position, if not contraindicated.	_____	_____

	YES	NO
9. Placed towel over chest to protect gown and bedding.	____	____
10. Applied clean gloves.	____	____
11. Poured water over toothbrush and applied toothpaste.	____	____
12. Assisted patient as needed to brush all surfaces of teeth.	____	____
a. Placed brush at gum line at 45 degree angle.	____	____
b. Brushed from gum line to crown of tooth.	____	____
c. Brushed inner surfaces of teeth.	____	____
d. Brushed back and forth on chewing surfaces.	____	____
13. Gently brushed tongue.	____	____
14. Allowed patient to rinse with clear water.	____	____
15. Held emesis basin under chin or placed conveniently on overbed table for patient to spit into.	____	____
16. Used mouthwash as patient desires.	____	____
17. Blotted mouth dry with tissue.	____	____
18. Rinsed toothbrush under running water and stored in a clean place.	____	____
19. Rinsed, dried and replaced emesis basin.	____	____
20. Removed gloves without contaminating self and dispose of correctly.	____	____

	YES	NO
21. Washed hands.	____	____
22. Made patient comfortable.	____	____
23. Evaluated according to established criteria.	____	____
24. Documented appropriately.	____	____

EVALUATORS COMMENTS

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Surfaces of teeth, gums, and mucous membranes appeared clean	4	3	2	1
Breath smelled clean	4	3	2	1

EVALUATORS COMMENTS

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PERFORMANCE EVALUATION KEY

4 -	Skilled — Can perform job with no additional training.
3 -	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 -	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 -	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

______________ (Date)

______________ (Evaluator's Signature)

______________ (Evaluator's Position)

PRACTICAL TEST 2

PROVIDE PERSONAL CARE

VII

JOB SHEET 2

Assist a weak or unconscious patient with oral hygiene.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's level of consciousness.	_____	_____
2. Noted any medical or nursing diagnoses related to the oral cavity.	_____	_____
3. Noted the condition of the patient's lips, teeth, tongue and gums.	_____	_____
4. Identified patient and explained procedure.	_____	_____
5. Provided privacy.	_____	_____
6. Washed hands.	_____	_____
7. Obtained all supplies needed.	_____	_____
8. Checked for operation of suction equipment.	_____	_____
9. Positioned patient on side so fluid may easily drain out of mouth instead of down the throat.	_____	_____

	YES	NO
10. Placed towel across chest and under chin.		
11. Placed emesis basin under chin.		
12. Applied clean gloves.		
13. Opened patient's mouth and inserted tongue blade to keep open if necessary.		
14. Used appropriate cleaning material to clean teeth, tongue, and gums.		
a. Cleaned teeth from gum line to crown.		
b. Cleaned inside surfaces of teeth.		
c. Cleaned chewing surfaces of teeth.		
15. Carefully used bulb syringe to place small amount of water into oral cavity and withdrew it if not contraindicated. Suction equipment was used if needed.		
16. Dried lips and face with tissue.		
17. Applied appropriate lubricant.		
18. Rinsed toothbrush under running water if used and stored in clean place.		
19. Rinsed, dried, and stored emesis basin.		
20. Disposed of all disposable items.		
21. Removed gloves without contaminating self.		
22. Washed hands.		
23. Repositioned patient comfortably.		

	YES	NO
24. Evaluated according to established criteria.	_____	_____
25. Documented appropriately.	_____	_____

EVALUATORS COMMENTS

____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Teeth, gums, tongue, and lips clean	4	3	2	1
Breath smelled clean	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

__________ (Date)

____________________ (Evaluator's Signature)

____________________ (Evaluator's Position)

PRACTICAL TEST 3

PROVIDE PERSONAL CARE

VII

JOB SHEET 3

Assist with cleaning dentures.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's need for assistance.	_____	_____
2. Noted any medical or nursing diagnoses related to the oral cavity.	_____	_____
3. Noted the condition of the patient's lips, tongue, gums, and dentures.	_____	_____
4. Observed the patient's technique in caring for the dentures.	_____	_____
5. Identified patient and explained procedure.	_____	_____
6. Provided privacy.	_____	_____
7. Washed hands.	_____	_____
8. Obtained all supplies needed including a denture cup clearly marked with the patient's name.	_____	_____

		YES	NO
9.	Raised bed to Fowler's position if patient could assist and this position was not contraindicated.	____	____
10.	Applied clean gloves.	____	____
11.	Filled bath basin or wash basin in bathroom with cool or slightly warm water.	____	____
12.	Used gauze square to remove dentures from patient's mouth or had patient remove dentures.	____	____
13.	Placed dentures in denture cup clearly labeled with patient's name.	____	____
14.	Placed cool water and denture cleaner (if available) in denture cup for soaking prior to cleaning, if desired.	____	____
15.	Cleaned dentures with toothbrush and dentifrice, holding over water.	____	____
	a. Brushed all surfaces much as with natural teeth.	____	____
	b. Inspected dentures for cracks or rough areas.	____	____
16.	Rinsed dentures thoroughly.	____	____
17.	Returned to denture cup with fresh water.	____	____
18.	Provided mouthwash or cool water for the patient to rinse his/her mouth.	____	____
19.	Inspected tongue and gums for integrity and cleanliness.	____	____
20.	Cleaned tongue and gums with sponge toothbrushes if needed.	____	____

	YES	NO
21. Replaced dentures in mouth or stored denture cup with dentures inside in a safe place.	______	______
22. Rinsed toothbrush under running water and stored in a clean place.	______	______
23. Rinsed, dried and replaced emesis basin.	______	______
24. Removed gloves without contaminating self and disposed of correctly.	______	______
25. Washed hands.	______	______
26. Positioned patient comfortably and appropriately.	______	______
27. Evaluated according to established criteria.	______	______
28. Documented appropriately.	______	______

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Surfaces of dentures and natural teeth appeared clean	4	3	2	1
Breath smelled clean	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 -	Skilled — Can perform job with no additional training.
3 -	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 -	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 -	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

____________ (Date)

________________________ (Evaluator's Signature)

________________________ (Evaluator's Position)

PRACTICAL TEST 4

PROVIDE PERSONAL CARE

VII

JOB SHEET 4

Comb hair.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
PROCEDURE: ASSESSMENT AND ANALYSIS		
1. Determined patient's need for assistance.	_____	_____
2. Noted any medical or nursing diagnoses related to the hair and scalp.	_____	_____
3. Examined hair for cleanliness, texture, distribution, and presence of lice or nits.	_____	_____
4. Examined scalp for dryness, redness, scaly areas, swelling, or any other lesions.	_____	_____
5. Checked with patient for hair products and style desired.	_____	_____
6. Gathered all equipment.	_____	_____
7. Adjusted bed to convenient working height if patient remained in bed.	_____	_____

	YES	NO
8. Assisted patient to sitting position, if allowed.	_____	_____
9. Draped towel over shoulder of patient in upright position or placed over pillow of patient lying down.	_____	_____
10. Divided hair into two or more sections for combing.	_____	_____
11. Turned or instructed patient to turn head to side if lying down to have more complete access to one side of hair at a time.	_____	_____
12. Combed from scalp to hair ends.	_____	_____
13. Positioned fingers near scalp and gently combed out tangles holding hair to prevent pulling.	_____	_____
14. Brushed hair if desired.	_____	_____
15. Repeated for opposite side.	_____	_____
16. Arranged hair into style desired.	_____	_____
17. Applied any hair-care products desired by patient.	_____	_____
18. Carefully removed towel from shoulders or pillow to prevent dropping loose hair over bed and patient.	_____	_____
19. Evaluated according to established criteria.	_____	_____
20. Documented appropriately.	_____	_____

EVALUATORS COMMENTS

____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Hair neat, clean, and free of tangles	4	3	2	1
Area free of loose hair	4	3	2	1
Hair care items put away	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.

3 - Moderately skilled — Has performed job during training program; limited additional training may be required.

2 - Limited skill — Has performed job during training program; additional training is required to develop skill.

1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

JOB SHEET 5

Shampoo hair.

Student's Name ____________________ Date __________

Evaluator's Name ____________________ Attempt No. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's need for assistance.	_____	_____
2. Determined patient's ability to assume various positions.	_____	_____
3. Noted any diagnoses relating to the hair or scalp.	_____	_____
4. Checked for doctor's order allowing shampoo if required by facility.	_____	_____
5. Checked with patient about hair-care products to be used.	_____	_____
6. Gathered all equipment.	_____	_____
7. Obtained wheelchair or stretcher if patient was to be transported to a sink for hair washing.	_____	_____

	YES	NO
8. Positioned patient appropriately for type of shampoo and facilities available.	____	____
a. If shampoo was given in bed, raised bed to comfortable working height.	____	____
b. Placed shampoo trough under patient's head and positioned drain portion in basin or bucket on a chair or floor for a bed shampoo.	____	____
9. Placed bath blanket or towels under patient's shoulders for a bed shampoo.	____	____
10. Assisted patient to sitting position and placed basin on overbed table, if patient could tolerate shampoo in this manner.	____	____
11. Placed towel over patient's chest for bed shampoo or over shoulders, if sitting up.	____	____
12. Prepared water at a comfortably warm temperature for a bed shampoo or had water running at a comfortably warm temperature, if at a sink.	____	____
13. Poured water over hair to wet thoroughly or immersed hair in water.	____	____
14. Applied shampoo to hair.	____	____
15. Worked the shampoo into a lather.	____	____
16. Rinsed the hair thoroughly.	____	____
17. Placed dry towel over hair to remove moisture.	____	____
18. Removed shampoo trough if used.	____	____
19. Dried hair with towels.	____	____

	YES	NO
20. Combed hair, taking care not to pull when straightening tangles.	____	____
21. Dried hair with dryer, if one was available and this was desired.	____	____
22. Applied any hair products desired and styled appropriately.	____	____
23. Removed any wet towels, bed linen, or gowns and provided dry replacements.	____	____
24. Evaluated according to established criteria.	____	____
25. Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Hair clean and neat	4	3	2	1
Patient warm and dry	4	3	2	1
Linens and gowns dry	4	3	2	1
Hair care items put away	4	3	2	1

EVALUATORS COMMENTS

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 6

PROVIDE PERSONAL CARE

VII

JOB SHEET 6

Shave a patient.

Student's Name ________________ Date ________

Evaluator's Name ________________ Attempt No. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed patient's need for assistance.	____	____
2. Noted any bleeding tendency or medications which would slow clotting.	____	____
3. Examined face for any skin lesions which would alter shaving technique.	____	____
4. Observed patient's preference for facial grooming such as a beard or mustache.	____	____
5. Identified patient and explained procedure.	____	____
6. Provided privacy.	____	____
7. Washed hands.	____	____
8. Gathered equipment.	____	____
9. Provided adequate lighting.	____	____

	YES	NO
10. Raised bed to Fowler's position, if not contraindicated.	____	____
11. Placed towel over chest to protect gown and linens.	____	____
12. For electric razor		
a. Applied pre-shave.	____	____
b. Plugged in or removed from charging unit and and turned on.	____	____
c. Pulled skin taut with fingers of non-dominant hand and held razor in dominant hand.	____	____
d. Used short up-and-down strokes when using a razor with flexible or flat head and circular motions when using a razor with a circular head.	____	____
e. Started with cheeks, proceeded to area around mouth and shaved the neck last.	____	____
For safety razor		
a. Applied gloves, if indicated or desired.	____	____
b. Patted very warm water on patient's face.	____	____
c. Applied a generous amount of soap or shaving cream.	____	____
d. Pulled skin taut with fingers of non-dominant hand and held razor in dominant hand.	____	____

		YES	NO
e.	Used long downward strokes over the cheeks and shorter strokes around the mouth.	____	____
f.	Rinsed the razor after each stroke.	____	____
g.	Avoided any growths such as warts or moles.	____	____
h.	Washed shaved area to remove any soap or shaving cream remaining.	____	____
i.	Removed gloves without contaminating self if they had been used.	____	____
13.	Applied after-shave if desired.	____	____
14.	Repositioned patient comfortably.	____	____
15.	Cleaned and replaced equipment.	____	____
16.	Evaluated according to established criteria.	____	____
17.	Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Face free of hair	4	3	2	1
Face free of nicks and abrasions	4	3	2	1
Equipment cleaned and replaced	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

JOB SHEET 7

Provide nail care.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed the condition of the nails, noting dirty areas under the nails, hangnails, dry or cracked cuticles, broken nails, discolored or thickened nails, or ingrown toe nails.	____	____
2. Noted any medical or nursing diagnoses involving the nails.	____	____
3. Noted any medical diagnoses which might make cutting the nails a more serious matter.	____	____
4. Identified patient and explained procedure.	____	____
5. Provided privacy.	____	____
6. Gathered equipment.	____	____
7. Provided adequate lighting.	____	____
8. Helped patient assume a comfortable position.	____	____

	YES	NO
9. Soaked fingernails and toenails, if at a time other than after the bath.	____	____
10. Used scissors or nail clippers, to trim fingernails straight across, even with or slightly longer than the fingertips.	____	____
11. Used emery board or nail file to shape nails as desired.	____	____
12. Used orange stick or cotton-tipped swabs to push back cuticle and cleaned under tips of nails.	____	____
13. Applied lotion, if desired, to help soften skin and cuticle.	____	____
14. Used nail clippers to trim toenails straight across, even with toes.	____	____
15. Used orange stick or cotton-tipped swabs to clean under nail if needed.	____	____
16. Applied lotion, if desired, beginning at toes and working toward ankle to stimulate circulation.	____	____
17. Replaced all equipment used.	____	____
18. Evaluated according to established criteria.	____	____
19. Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Nails clean	4	3	2	1
Nails neatly trimmed with smooth edges	4	3	2	1
Skin around nails cared for	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 -	Skilled — Can perform job with no additional training.
3 -	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 -	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 -	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

______________ ______________________________

(Date) (Evaluator's Signature)

____

(Evaluator's Position)

JOB SHEET 8

Administer a back rub.

Student's Name ______________________ Date ______________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's ability to turn to side or abdomen.	_____	_____
2. Checked for medical or nursing diagnoses which would contraindicate a back rub or call for special attention.	_____	_____
3. Assessed skin for reddened areas or breaks in the skin, especially over bony prominences.	_____	_____
4. Identified patient and explained procedure.	_____	_____
5. Washed hands.	_____	_____
6. Gathered equipment.	_____	_____
7. Provided privacy.	_____	_____
8. Positioned patient on side or abdomen.	_____	_____

	YES	NO
9. Poured a small amount of lotion into palms of hands and held palms together to warm lotion.		
10. Placed hands side by side at base of spine and stroked slowly upward to shoulders. Moved hands out on shoulders and backed down to starting point. Repeated for several minutes.		
11. Used circular strokes over all bony prominences.		
12. Continued back rub for 4-6 minutes, reapplying lotion as needed.		
13. Removed excess lotion by patting with towel.		
14. Repositioned patient comfortably and adjusted gown and bedding.		
15. Returned all equipment to storage area.		
16. Evaluated according to established criteria.		
17. Documented appropriately.		

EVALUATORS COMMENTS

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Back appears moisturized	4	3	2	1
Patient comfortable and relaxed	4	3	2	1

EVALUATORS COMMENTS

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

819

JOB SHEET 9

Dress a patient in a gown.

Student's Name ____________________ Date ____________

Evaluator's Name ____________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined the patient's ability to help.	____	____
2. Determined which arm had the IV line.	____	____
3. Decided whether the diameter of the IV solution container was less than the diameter of the gown sleeve.	____	____
4. Determined whether or not the IV was being delivered by a pump.	____	____
5. Washed hands.	____	____
6. Obtained clean gown.	____	____
7. Provided privacy.	____	____
8. Untied gown.	____	____
9. Removed sleeve from arm without IV and covered patient with sheet or bath blanket.	____	____

		YES	NO
10.	Followed manufacturer's directions for removing IV from pump. Adjusted roller clamp to KVO rate.	_____	_____
11.	Pulled gown sleeve over arm with IV line and up tubing toward IV solution container.	_____	_____
12.	Removed IV solution container from pole and slipped gown over container, keeping container elevated above IV site.	_____	_____
13.	Placed IV container through sleeve of clean gown and replaced solution on pole.	_____	_____
14.	Continued pulling sleeve over tubing and patient's arm.	_____	_____
15.	Reactivated the pump according to manufacturer's directions. Opened roller clamp.	_____	_____
16.	Placed the sleeve of the gown over the arm without the IV.	_____	_____
17.	Adjusted gown and tie.	_____	_____
18.	Disposed of gown in appropriate place.	_____	_____
19.	Washed hands.	_____	_____
20.	Evaluated according to established criteria.	_____	_____
21.	Documented appropriated.	_____	_____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Gown clean	4	3	2	1
Gown appropriately arranged and secured	4	3	2	1
IV line and solution intact	4	3	2	1
IV solution dripping at correct rate	4	3	2	1

EVALUATORS COMMENTS

PERFORMANCE EVALUATION KEY

4 -	Skilled — Can perform job with no additional training.
3 -	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 -	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 -	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

______________ (Date)

______________________________ (Evaluator's Signature)

______________________________ (Evaluator's Position)

PRACTICAL TEST 10

PROVIDE PERSONAL CARE

VII

JOB SHEET 10

Provide catheter care.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any evidence of drainage around the urinary meatus.	____	____
2. Assessed urinary drainage.	____	____
3. Checked female patient's ability to maintain necessary position without assistance.	____	____
4. Identified patient and explained procedure.	____	____
5. Provided privacy.	____	____
6. Obtained supplies.	____	____
7. Applied clean gloves.	____	____
8. Exposed perineal area.	____	____
a. For male:		
Folded covers back over thighs.	____	____

	YES	NO
b. For female:		
Assisted patient to bend knees and separated legs to expose perineal area.	____	____
9. Placed disposable underpad under patient's hips.	____	____
10. Assured that there is no tension being placed on catheter.	____	____
11. Applied soap and water to clean wash cloth.	____	____
12. For male:		
a. Grasped penis gently with non-dominant hand.	____	____
b. Retracted foreskin gently if uncircumcised.	____	____
c. Washed skin around catheter using a circular motion with washcloth touching skin and catheter.	____	____
d. Rinsed skin thoroughly.	____	____
e. Cleaned the catheter with a clean washcloth, soap and water from the urinary meatus down about four inches.	____	____
f. Gently patted the area dry and replaced foreskin.	____	____
13. For female:		
a. Separated labia with non-dominant hand.	____	____

		YES	NO
b.	Washed skin around catheter using a downward motion first on the far side of the catheter and then on the near side.	____	____
c.	Used a clean portion of the washcloth for each stroke.	____	____
d.	Rinsed area thoroughly.	____	____
e.	Cleaned the catheter with a clean washcloth, soap, and water, from the urinary meatus down about four inches.	____	____
f.	Patted the area dry.	____	____
14.	Made sure entire perineal area was clean and dry.	____	____
15.	Cleaned and replaced equipment.	____	____
16.	Disposed of gloves without contaminating self.	____	____
17.	Washed hands.	____	____
18.	Assisted patient to assume comfortable position and replaced covers.	____	____
19.	Evaluated according to established criteria.	____	____
20.	Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Skin around urinary meatus clean and free of any drainage	4	3	2	1
Tubing straight and urine draining freely	4	3	2	1
Catheter positioned correctly	4	3	2	1

EVALUATORS COMMENTS

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PROVIDE PERSONAL CARE

JOB SHEET 11

Care for a patient with a catheter before and after a tub bath.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any evidence of drainage around the urinary meatus.	_____	_____
2. Checked for allergy to tape.	_____	_____
3. Identified patient and explained procedure.	_____	_____
4. Gathered supplies.	_____	_____
5. Provided privacy.	_____	_____
6. Applied clean gloves.	_____	_____
7. Clamped catheter.	_____	_____
8. Used an antiseptic swab to swab site where catheter was connected to tubing.	_____	_____
9. Disconnected catheter and tubing, but did not let the ends touch anything.	_____	_____

	YES	NO
10. Placed the catheter plug in the catheter and the protector over the drainage tubing without touching the narrow part of the plug or the inside of the protector.	_____	_____
11. Unclamped catheter.	_____	_____
12. Removed gloves without contaminating self and washed hands.	_____	_____
13. Applied clean gloves.	_____	_____
14. Clamped catheter.	_____	_____
15. Removed catheter plug and protector without touching tip of either catheter or tubing. Disposed of plug.	_____	_____
16. Reconnected the catheter to drainage tubing.	_____	_____
17. Used an antiseptic swab to swab site where tubes are connected.	_____	_____
18. Unclamped catheter.	_____	_____
19. Removed gloves without contaminating self and washed hands.	_____	_____
20. Checked to see that site where tape will be applied (upper thigh for male or female or abdomen for male) was clean and dry.	_____	_____
21. Cut tape approximately 4 inches long.	_____	_____
22. Secured catheter to desired site with tape or leg strap.	_____	_____

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	YES	NO
23. Evaluated according to established criteria	____	____
24. Documented appropriately.	____	____

EVALUATORS COMMENTS

____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Catheter secured without unnecessary tension	4	3	2	1
Urine draining freely	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 -	Skilled — Can perform job with no additional training.
3 -	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 -	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 -	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

____________ (Date)

________________________ (Evaluator's Signature)

________________________ (Evaluator's Position)

JOB SHEET 12

Provide care for the incontinent patient.

Student's Name ________________________ Date ______________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined what fresh linen is needed.	_____	_____
2. Checked to see if a diaper was in use or needed and determined appropriate size.	_____	_____
3. Determined patient's ability to turn and assist in procedure.	_____	_____
4. Identified patient and explained procedure.	_____	_____
5. Obtained supplies.	_____	_____
6. Provided privacy.	_____	_____
7. Applied clean gloves.	_____	_____
8. Unfastened diaper if one was in place. Folded soiled areas inward and tucked between legs.	_____	_____

	YES	NO
9. Positioned patient by separating legs and bending knees to expose perineal area.	_____	_____
10. Removed any visible fecal material with toilet tissue, then bathed area with soap and water, rinsing thoroughly.	_____	_____
For the male patient		
a. Cleansed the area around the urinary meatus first using a circular motion.	_____	_____
b. Washed the penis from the meatus toward the body.	_____	_____
c. Gently cleansed the scrotum.	_____	_____
d. Cleansed anterior thighs and surrounding area as needed.	_____	_____
For the female patient		
a. Separated labia and cleansed using downward strokes and separate area of washcloth for each stroke.	_____	_____
b. Washed outward from perineum.	_____	_____
c. Cleansed anterior thighs and surrounding area as needed.	_____	_____
11. Dried area thoroughly.	_____	_____
12. Assisted patient to turn to side.	_____	_____
13. Folded soiled diaper and/or underpad under patient, keeping soiled area inside away from patient.	_____	_____

	YES	NO
14. Loosened soiled drawsheet and folded toward patient, keeping soiled part inside away from patient.	____	____
15. Removed any feces from anal area with tissue.	____	____
16. Cleansed anal area with soap and water, rinsing thoroughly.	____	____
17. Washed buttocks and posterior thighs as necessary.	____	____
18. Dried area thoroughly.	____	____
19. Applied lotion to buttocks by massaging in circular motion to stimulate circulation. Paying special attention to coccyx and other bony prominences.	____	____
20. Placed clean drawsheet on bed.	____	____
21. Placed clean disposable underpad in place.	____	____
22. Applied clean diaper by placing inside surface of diaper back against patient and tucked front of diaper between legs.	____	____
23. Assisted patient to turn to opposite side.	____	____
24. Checked to see that no wet or soiled areas remained on surfaces where patient was lying during cleansing. Cleansed if needed.	____	____
25. Removed gloves being careful not to contaminate self.	____	____

	YES	NO
26. Pulled drawsheet, disposable underpad, and diaper into place; tucked sheet securely.	____	____
27. Assisted patient on back and secured tapes on diaper.	____	____
28. Replaced gown, if necessary.	____	____
29. Straightened or replaced top covers.	____	____
30. Positioned patient comfortably.	____	____
31. Replaced equipment, discarding soiled underpad and diaper in plastic lined trash container.	____	____
32. Discarded soiled linen.	____	____
33. Washed hands.	____	____
34. Evaluated according to established criteria.	____	____
35. Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Patient clean and dry	4	3	2	1
Linens clean and dry	4	3	2	1
No odor or urine or feces	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 13

PROVIDE PERSONAL CARE

VII

JOB SHEET 13

Assist with a tub bath or shower.

Student's Name ______________________ Date ____________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's need for assistance.	_____	_____
2. Examined skin for any bruises, rashes, reddened areas, breaks in the skin, or changes in color.	_____	_____
3. Checked for any reduction in sensation that would alter ability to feel water temperature.	_____	_____
4. Checked for any dressings, incisions, or catheters which would need attention before bathing.	_____	_____
5. Noted any medical or nursing diagnoses relative to bathing or skin care.	_____	_____
6. Identified patient and explained procedure.	_____	_____
7. Prepared any areas such as dressings or catheters.	_____	_____
8. Gathered all equipment.	_____	_____

	YES	NO
9. Obtained wheelchair for transporting patient, if necessary.	____	____
10. Checked shower or tub area for warmth.	____	____
11. Cleaned area with disinfectant used by agency.	____	____
12. Filled tub 1/3 to 1/2 full of water at 95-105 degrees F. (35-39.3 degrees C.) or adjusted shower flow.	____	____
13. Placed bath mats in position.	____	____
14. Placed bath sign on door to assure privacy for patient.	____	____
15. Assisted or transported patient to shower.	____	____
16. Pointed out call light and cautioned patient not to lock doors if alone in tub or shower.	____	____
17. Assisted to remove gown, robe, and slippers.	____	____
18. Re-checked water temperature.	____	____
19. Assisted patient into tub or shower, encouraging patient to use any assistive devices such as grab bars for safety.	____	____
20. Assisted in bathing as necessary.	____	____
21. Checked patient if remained alone in tub or shower.	____	____
22. Placed opened bath blanket on stool or chair.	____	____
23. Turned off shower or allowed water to drain from tub.	____	____

	YES	NO
24. Assisted patient out of tub or shower.	_____	_____
25. Seated patient on stool or chair and wrapped bath blanket around patient.	_____	_____
26. Dried patient from head to toe, using bath blanket to cover areas not being dried.	_____	_____
27. Assisted patient in applying deodorant and lotion as desired.	_____	_____
28. Assisted patient to dress.	_____	_____
29. Assisted or transported patient back to bed and made comfortable.	_____	_____
30. Removed all soiled towels and washcloths from tub or shower area.	_____	_____
31. Cleaned tub or shower (and shower chair, if used) with disinfectant.	_____	_____
32. Evaluated according to established criteria.	_____	_____
33. Documented appropriately.	_____	_____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Skin clean and dry	4	3	2	1
Skin free of redness	4	3	2	1
Skin free of odor	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 14

PROVIDE PERSONAL CARE

VII

JOB SHEET 14

Give a complete bed bath.

Student's Name ______________________ Date ______________

Evaluator's Name ______________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's need for assistance.	_____	_____
2. Examined skin for any bruises, rashes, reddened areas, breaks in the skin, or changes in color.	_____	_____
3. Noted any medical or nursing diagnoses relative to bathing or skin care.	_____	_____
4. Checked for any areas which should not become wet, such as dressings or casts.	_____	_____
5. Identified patient and explained procedure.	_____	_____
6. Gathered all equipment.	_____	_____
7. Checked room for warmth.	_____	_____
8. Placed bath sign on door.	_____	_____
9. Washed hands.	_____	_____
10. Removed bedspread.	_____	_____

	YES	NO
11. Placed bath blanket over top sheet.		
12. Pulled top sheet to foot of bed and removed.		
13. Offered bedpan or urinal.		
14. Washed hands.		
15. Assisted patient in completing oral hygiene.		
16. Removed patient's gown.		
17. Applied gloves, if desired or required.		
18. Washed the face, ears, and neck.		
a. Placed towel over chest.		
b. Made a mitt by folding washcloth around hand.		
c. Washed the eyes, using water only. Used one corner of the mitt to wipe from the nose to the outer corner of the eye and the opposite corner in the same manner for the other eye.		
d. Patted the eyes dry.		
e. Asked if the patient wanted soap used on the face; used soap for all other areas.		
f. Washed the face, neck and ears.		
g. Dried area thoroughly.		

		YES	NO
19.	Washed the arms and hands	____	____
a.	Placed the towel under the farthest arm.	____	____
b.	Washed the arm with long, smooth, but firm strokes from the wrist toward the shoulder to stimulate circulation. Rinsed well.	____	____
c.	Washed axilla thoroughly. Rinsed well.	____	____
d.	Dried by wrapping towel around arm and patting.	____	____
e.	Placed towel under hand and placed wash basin on towel.	____	____
f.	Placed hand in water and washed thoroughly.	____	____
g.	Removed basin and dried hand.	____	____
h.	Repeated procedure for other arm.	____	____
20.	Washed chest and abdomen.	____	____
a.	Placed towel over chest and folded bath blanket back to waist.	____	____
b.	Lifted corner of towel to wash chest. Paid special attention to folds of skin beneath female breasts. Rinsed well.	____	____
c.	Dried thoroughly.	____	____
d.	Turned towel lengthwise or used a second towel to cover the abdomen.	____	____
e.	Pulled the bath blanket to the pubic area.	____	____

		YES	NO
f.	Washed the abdomen and rinsed well.	______	______
g.	Dried thoroughly.	______	______
21.	Washed the legs and feet.	______	______
a.	Placed the towel under the far leg.	______	______
b.	Washed the leg using long, smooth, but firm strokes from the ankle to the hip to stimulate circulation. Rinsed well.	______	______
c.	Dried by wrapping the towel around the leg and patting.	______	______
d.	Placed the towel under the foot and placed the bath basin on it.	______	______
e.	Placed the foot in the water, giving support to the leg, and washed the foot thoroughly.	______	______
f.	Removed basin and dried foot.	______	______
g.	Repeated procedure for other leg and foot.	______	______
22.	Changed bath water.	______	______
23.	Assisted patient to turn to abdomen or side.	______	______
24.	Placed towel lengthwise along patient's back.	______	______
25.	Washed back from waist to neck thoroughly.	______	______
26.	Rinsed well and dried thoroughly.	______	______

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	YES	NO
27. Repeated procedure for buttocks.	____	____
28. Provided a thorough back rub unless contraindicated.	____	____
29. Assisted patient to turn to back.	____	____
30. Changed bath water and obtained clean wash cloth.	____	____
31. Washed the perineal area.	____	____
Male patients:		
a. Arranged bath blanket to expose perineal area while still covering trunk and as much of legs as possible.	____	____
b. Placed towel over upper legs.	____	____
c. Applied gloves.	____	____
d. Gently retracted the foreskin.	____	____
e. Cleansed the area around the urinary meatus first, using a circular motion and rinsed thoroughly.	____	____
f. Gently replaced the foreskin.	____	____
g. Washed the penis with strokes toward the trunk.	____	____
h. Rinsed thoroughly.	____	____
i. Gently cleansed the scrotum and rinsed.	____	____
j. Dried area thoroughly, but gently.	____	____

	YES	NO
Female patients:		
a. Separated legs and bent knees.	____	____
b. Placed towel on bed between legs.	____	____
c. Applied gloves.	____	____
d. Separated labia and cleansed area over meatus first, using downward strokes.	____	____
e. Using separate areas of wash cloth, repeated downward strokes first on far side and then on near side.	____	____
f. Rinsed area thoroughly.	____	____
g. Dried by patting gently.	____	____
32. Removed gloves without contaminating self.	____	____
33. Assisted patient to apply lotion or other products as desired.	____	____
34. Replaced patient's gown.	____	____
35. Emptied bath basin and replaced.	____	____
36. Assisted patient with hair care, shaving or applying make-up as needed.	____	____
37. Changed bed linens.	____	____
38. Damp-dusted and straightened unit.	____	____
39. Returned bed to lowest level.	____	____
40. Placed call light and all necessary items with reach of patient.	____	____

	YES	NO
41. Removed bath signs from door.	_____	_____
42. Evaluated according to established criteria.	_____	_____
43. Documented appropriately.	_____	_____

EVALUATORS COMMENTS

____

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Patient clean and dry	4	3	2	1
Gown clean, secured and appropriately placed	4	3	2	1
Unit neat	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 -	Skilled — Can perform job with no additional training.
3 -	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 -	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 -	Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

____
(Date)

____
(Evaluator's Signature)

____
(Evaluator's Position)

PRACTICAL TEST 15

PROVIDE PERSONAL CARE

VII

JOB SHEET 15

Assist with a partial or self-help bath.

Student's Name ______________________ Date ______________

Evaluator's Name ____________________ Attempt No. ________

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

EVALUATOR NOTE: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's need for assistance.	_____	_____
2. Examined skin for any bruises, rashes, reddened areas, breaks in the skin, or changes in color.	_____	_____
3. Noted any medical or nursing diagnoses relative to bathing or skin care.	_____	_____
4. Checked for any areas which should not become wet such as dressings or casts.	_____	_____
5. Identified patient and explained procedure.	_____	_____
6. Gathered all equipment.	_____	_____
7. Checked room for warmth.	_____	_____
8. Placed bath sign on door.	_____	_____
9. Washed hands.	_____	_____

	YES	NO
10. Removed top covers and replaced with bath blanket.	_____	_____
11. Offered bedpan or urinal.	_____	_____
12. Washed hands.	_____	_____
13. Assisted patient in completing oral hygiene.	_____	_____
14. Bathed as required.	_____	_____
For dependent patient		
a. Raised bed to comfortable working height.	_____	_____
b. Removed gown.	_____	_____
c. Applied gloves if desired or required by agency.	_____	_____
d. Washed face and patted dry.	_____	_____
e. Washed and dried axillary area.	_____	_____
f. Placed each hand in basin or water, washed and dried thoroughly.	_____	_____
g. Assisted patient to turn to side or abdomen.	_____	_____
h. Washed and dried back.	_____	_____
i. Performed back rub unless contraindicated.	_____	_____
j. Washed and dried perineal area, wearing gloves.	_____	_____
k. Replaced gown.	_____	_____

	YES	NO
For patient who can assist		
a. Raised head of bed to Fowler's position.	____	____
b. Placed basin of water on overbed table convenient for the patient to reach.	____	____
c. Instructed patient to call when ready to have legs, feet, and back washed.	____	____
d. Raised bed to comfortable working height when patient called.	____	____
e. Applied gloves, if desired or required by agency.	____	____
f. Washed legs and dried thoroughly.	____	____
g. Placed each foot in basin of water, washed and dried thoroughly.	____	____
h. Changed bath water.	____	____
i. Assisted patient to turn to back or side.	____	____
j. Washed and dried back.	____	____
k. Performed rub unless contraindicated.	____	____
l. Gave patient opportunity to bathe perineal area.	____	____
m. Assisted patient into clean gown.	____	____
15. Emptied bath water, cleaned and dried basin.	____	____

	YES	NO
16. Assisted with hair care, shaving or other care required.	____	____
17. Changed bed linens, damp-dusted and straightened unit.	____	____
18. Returned bed to lowest level.	____	____
19. Placed call light and all necessary items within reach of patient.	____	____
20. Removed bath sign from door.	____	____
21. Evaluated according to established criteria.	____	____
22. Documented appropriately.	____	____

EVALUATORS COMMENTS ______________________________

____

PRODUCT EVALUATION

(EVALUATOR NOTE: Rate the student on the following criteria by circling the appropriate numbers. Each item must be rated at least a "3" for mastery to be demonstrated. (See performance evaluation key below.) If the student is unable to demonstrate mastery, student materials should be reviewed and another product must be submitted for evaluation.)

CRITERIA

Patient clean and dry	4	3	2	1
Patient odor-free	4	3	2	1
Unit neat	4	3	2	1

EVALUATORS COMMENTS

____

____

____

PERFORMANCE EVALUATION KEY

4 - Skilled — Can perform job with no additional training.
3 - Moderately skilled — Has performed job during training program; limited additional training may be required.
2 - Limited skill — Has performed job during training program; additional training is required to develop skill.
1 - Unskilled — Is familiar with process, but is unable to perform job.

AVERAGE RATING

(EVALUATOR NOTE: If an average score is needed to coincide with a competency profile, total the designated points in "Product Evaluation" an divide by the total number of criteria.)

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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WRITTEN TEST

PROVIDE PERSONAL CARE

VII

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with personal care for patients to their correct definitions. Write the correct letters in the blanks.

Part 1

______1. Transparent anterior covering of the eye

______2. Any disturbance in the integrity of the skin

______3. Stretched tight

______4. Fleshy protrusions of the gluteal muscles at the lower, posterior area of the trunk

______5. Eggs of lice

______6. The reproductive organs and especially the external organs

______7. Personal hygiene measures commonly carried out for patients in the morning

______8. Substance used in cleaning teeth

a. AM care

b. Buttocks

c. Cornea

d. Dentifrice

e. Genitalia

f. Lesion

g. Nits

h. Taut

i. Urinary meatus

Part 2

______1. In females, the area from just above the urinary meatus to the anus and in males, the area between the scrotum and the anus

______2. Artificial teeth

______3. The condition of being infested with lice

______4. Fleshy, lip-like structures of the external female genitalia

______5. Area under the arm; armpit

______6. A body opening for the elimination of urine

______7. Procedures to ensure cleanliness of the mouth

______8. Personal care measures commonly carried out before bedtime

a. Axilla

b. Dentures

c. Labia

d. Oral hygiene

e. Pediculosis

f. Perineum

g. PM care

h. Taut

i. Urinary meatus

Part 3

_______1. Tubing with inflatable bulb at tip; remains in place to drain the urinary bladder

_______2. White area visible in the eye; white of the eye

_______3. Unable to control bowel or bladder function

_______4. Accumulation of brown crusts on the teeth and lips

_______5. Parasitic insects which live on the human body, on other mammals and birds

_______6. Skin at base of nails

_______7. Cleanliness

_______8. A pouch-like structure of the male reproductive system

a. Cuticle

b. Foley catheter

c. Hygiene

d. Incontinent

e. Lice

f. Sclera

g. Scrotum

h. Sordes

i. Urinary meatus

OBJECTIVE 2

Select from a list true statements about the purposes of providing daily personal care. Write an "X" in the blank before each true statement.

_______1. Personal care measures can help control odor.

_______2. Elimination of waste products is increased when personal care measures are carried out.

_______3. Bathing can slow growth of pathogenic organisms.

_______4. Joint function may be improved by the use of personal care measures.

_______5. Bath time is a poor time for physical observations.

_______6. The nurse spends very little time with the patient involved in personal care measures.

______7. Bathing provides a time when physical and psychological needs of the patient may be met.

______8. Moist heat increases muscle tension.

______9. Respirations are depressed by personal care activities.

______10. Time spent providing personal care can also be used for patient teaching.

OBJECTIVE 3

Select from a list procedures included in AM care. Write an "X" in the blank before each correct answer.

______1. Changing the hospital gown

______2. Shaving male patients

______3. Changing all surgical dressings

______4. Teaching crutch-walking

______5. Damp dusting items in patient's unit

______6. Taking blood pressure

______7. Providing a back rub

______8. Changing bed linen

______9. Assisting female patients with make-up

______10. Taking temperature

______11. Providing nail care

______12. Giving medications

OBJECTIVE 4

Select from a list procedures included in PM care. Write an "X" in the blank before each correct answer.

______1. Offer bedpan or urinal

______2. Providing sleeping medication

______3. Ambulating the patient

______4. Assisting with oral hygiene

______5. Changing soiled linen

______6. Changing Foley catheters

______7. Providing a back rub

______8. Providing perineal care

OBJECTIVE 1

Part 1

1. c
2. f
3. h
4. b
5. g
6. e
7. a
8. d

Part 2

1. f
2. b
3. e
4. c
5. a
6. i
7. d
8. g

Part 3

1. b
2. f
3. d
4. h
5. e
6. a
7. c
8. g

OBJECTIVE 2 1, 2, 3, 4, 7, 10

OBJECTIVE 3 1, 2, 5, 7, 8, 9, 11

OBJECTIVE 4 1, 4, 5, 7, 8

OBJECTIVE 5

Refer to practical test ratings for Job Sheets 1-15.

OBJECTIVE SHEET

PROVIDE FOR PATIENT MOVEMENT

VIII

INTRODUCTION

Probably at some time or other, most of us have wished we didn't have to move so much. We wished for a time when we could just do nothing. Actually our constant activity is extremely beneficial to our overall well-being. It helps preserve and enhance our body functions.

Many hospital patients and nursing home residents do not have the benefits of an active life. Because of their physical conditions, their movements are limited and body processes can suffer. Many nursing actions are aimed at overcoming the effects of immobility and they are extremely important actions.

When task analyses were made to determine the most frequent nursing actions performed by practical nurses, those connected with mobility were high on the list. We must learn to perform these tasks well for the patient's well-being and safety and for our own safety.

UNIT OBJECTIVE

After completing this unit the student should be able to recognize the benefits of mobility and the dangers of immobility, choose nursing interventions and therapeutic devices to minimize the effects of immobility, use safety devices wisely and safely when necessary, and move or assist the patient to move safely. The student will demonstrate these competencies by completing an assignment sheet, job sheets, and written test with a minimum of 85 per cent accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will:

1. Match terms associated with patient movement to their correct definitions.
2. Match terms associated with range of motion to their correct definitions.
3. Select benefits derived from exercise.
4. Choose the best word or phrase to complete statements about factors that restrict mobility.

5. List problems related to immobility.

6. Choose the best word or phrase to complete statements about nursing interventions that prevent or decrease the effects of immobility.

7. Choose the best word or phrase to complete statements about therapeutic devices used to combat the effects of immobility.

8. Choose the best word or phrase to complete statements about the risk factors in skin breakdown.

9. Select methods to prevent decubitus ulcers.

10. Label common body positions.

11. Select from a list patients at risk for falls.

12. Select from a list interventions for preventing falls.

13. Identify safety devices.

14. Choose the best word or phrase to complete statements about the nursing process when safety devices are indicated.

15. Assess mobility (Assignment Sheet 1)

16. Demonstrate the ability to:

    a. Perform passive range of motion exercises. (Job Sheet 1)

    b. Instruct patient in active range of motion exercises. (Job Sheet 2)

    c. Apply anti-embolism stockings. (Job Sheet 3)

    d. Position the patient in the supine, prone, lateral, Fowler's and Sim's positions. (Job Sheet 4)

    e. Use a turning sheet. (Job Sheet 5)

    f. Logroll a patient. (Job Sheet 6)

    g. Assist a patient to dangle. (Job Sheet 7)

h. Transfer a patient to a chair or wheel chair. (Job Sheet 8)

i. Assist a patient to ambulate. (Job Sheet 9)

j. Assist a patient to ambulate with assistance devices. (Job Sheet 10)

k. Assist a falling patient. (Job Sheet 11)

l. Transfer a patient to a carrier. (Job Sheet 12)

m. Use a mechanical lift. (Job Sheet 13)

n. Apply safety devices. (Job Sheet 14)

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
  - Assist students to conduct a chapter service project on body mechanics and movement.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
  - Plan community or school health project that involves disseminating pamphlets about safety in movement.

DELIVERY

Objectives 1 and 2

- Discuss terms dealing with patient movement.
- Discuss terms dealing with range of motion.
- Discuss which joint movements are possible in various joints.
- Instruct students to perform various joint movements.

Objective 3

- Discuss benefits derived from exercise.
- Brainstorm ways to provide exercise for patients.

Objective 4

- Discuss factors which alter mobility.
- Have students share past experiences with immobility and their feelings about their experiences.

Objective 5

- Discuss problems related to immobility.
- Have students share relevant incidents involving immobility, and share with them some of your own experiences.

Objective 6

- Discuss measures to prevent or decrease the effect of immobility.
- Role play a teaching experience.
- List as many ways as possible to provide environmental stimulation for patients or nursing home residents.

Objective 7

- Discuss therapeutic devices.
- Show any devices available.

Objective 8

- Discuss risk factors in skin breakdown.
- Discuss the Braden Scale for predicting Pressure Sore Risk.

Objective 9

- Discuss methods to prevent decubitus ulcers.
- Show videotape, *Decubitus Ulcers: Principles of Prevention.*

Objective 10

- Discuss various body positions.
- Identify various purposes of different positions.

Objective 11

- Discuss patients at risk for falls.
- Use computer software *Preventing Patient Falls.*

Objective 12

- Discuss common safety devices for patients.
- Show examples of safety devices.

Objective 13 and 14

- Discuss the use of the nursing process when safety devices are indicated.
- Discuss ways to avoid the use of safety devices.

APPLICATION

Objective 15

- Discuss Assignment Sheet 1.
- Have students complete assignment sheet.

Objective 16

- Discuss Job Sheet 1.
- Show videotape, *Range of Motion Exercises.*
- Have students practice range of motion exercises.
- Discuss Job Sheet 2.

- Think of ways patient can accomplish active range of motion exercises.
- Show videotape, *Preparing the Patient for Independent Movement.*
- Have students practice active range of motion exercises.
- Discuss Job Sheet 3.
- Have students practice measuring and applying anti-embolism stockings.
- Discuss Job Sheet 4.
- Show videotape, *Positioning to Prevent Complications.*
- Have students practice positioning.
- Discuss Job Sheet 5.
- Have students practice with turning sheet.
- Discuss Job Sheet 6.
- Have students practice logrolling a patient.
- Discuss Job Sheet 7.
- Have students practice dangling a patient.
- Discuss Job Sheet 8.
- Demonstrate wheelchair.
- Show videotape, *Lifting and Moving the Patient.*
- Have students practice transferring a patient to a chair or wheelchair.
- Discuss Job Sheet 9.
- Show students a gait belt.
- Show videotape, *Transfer Activities and Ambulation.*

- Have students practice ambulating a patient.
- Discuss Job Sheet 10.
- Show students cane, walker, and crutches.
- Have students practice adjusting cane, walker, and crutches.
- Have students practice walking with cane, walker, and crutches.
- Discuss Job Sheet 11.
- Have students practice assisting a "falling patient."
- Discuss Job Sheet 12.
- Have students practice transfer to a carrier.
- Discuss Job Sheet 13.
- Demonstrate a mechanical lift.
- Have students practice with a mechanical lift.
- Discuss Job Sheet 14.
- Have students practice applying safety devices.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual study as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.

- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Lifting and Moving the Patient*, Medcom M036
- *Preparing the Patient for Independent Movement*, Medcom 650
- *Transfer Activities and Ambulation*, Medcom 1080
- *Positioning to Prevent Complications*, Medcom 1086
- *Decubitus Ulcers: Principles of Prevention*, Medcom 1067
- *Range of Motion Exercises*, Medcom 1070

Address for all of above:

Medcom, Inc.
P.O. Box 3225
Garden Grove, CA 92642

Computer Software

- *Preventing Patient Falls*. Computerized Educational Systems, 307 Park Lake Circle, P.O. Box 536905, Orlando, FL 32853-6905.

UNIT REFERENCES

- Bergstrom, Nancy and Barbara J. Braden, Antoinette Laguzza, Victoria Holman. "The Braden scale for Predicting Pressure Sore Risk," *Nursing Research*, July/August 1987.
- Braden, Barbara J. and Ruth Bryant. "Innovations to Prevent and Treat Pressure Ulcers", *Geriatric Nursing*, July/August, 1990.
- Cassell, Belva. "Treating Pressure Sores Stage by Stage," *RN*, January, 1986.
- Colburn, Louise. "Preventing Pressure Ulcers: How to Recognize and Care for Patients at Risk," *Nursing 90,* December, 1990.
- Corwin, Dena and Carol A. Miller. "Get Your Patient Off on the Right Foot," *RN*, November, 1990.
- Easterling, Margaret. "Which of Your Patients is Headed for a Fall?," *RN*, January, 1990.
- Fletcher, Kathleen Ryan. "Restraints Should Be a Last Resort," *RN*, January, 1990.
- Hegner, Barbara R. and Esther Caldwell. *Assisting in Long-Term Care.* Delmar Publishers, Inc., Albany, 1988.
- Hogan, Jean and Sheila A. Sorrentino. *Textbook for Long-Term Care Assistants.* The C.V. Mosby Company, St. Louis, 1988.
- Kerbs, Linda. "Paralysis: Keeping Bedsores at Bay," *RN*, December, l987.
- Knight, Mary Kay. "Our Safety Net Keeps Patients from Falling," *RN*, December, 1985.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures* (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- Lovell, Helen and Cynthia Anderson. "Put Your Patient on the Right Bed," *RN*, May, 1990.

- Masoorli, Susan Thomas. "Preventing Pressure Sores is a Family Affair," *RN*, July, 1987.
- McConnell, Edwina A. "Applying Anti-Embolism Stockings," *Nursing 90*, October, 1990.
- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques*. The C.V. Mosby Company, St. Louis, Missouri, 1986.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C.V. Mosby Company, St. Louis, Missouri, 1987.
- *Procedures*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1983.
- *Providing Early Mobility*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1980.
- Rosdahl, Caroline Bunker. *Textbook of Basic Nursing* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1985.
- Sloan, Jamee Reid. *Practical Nursing-Volume 1*. Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.
- Sorrentino, Sheila A. *Textbook for Nursing Assistants* (2nd ed). The C.V. Mosby Company, St. Louis, Missouri, 1987.
- Strumpf, Neville E., Lois K. Evans and Doris Schwartz. "Restraint-Free Care: From Dream to Reality," *Geriatric Nursing*, May/June, 1990.
- Timby, Barbara K. *Clinical Nursing Procedures*. J.B. Lippincott Company, Philadelphia, Pennsylvania, 1989.
- Will, Connie A. and Judith B. Eighmy. *Being a Long-Term Care Nursing Assistant* (2nd ed). Prentice Hall, Englewood Cliffs, New Jersey, 1988.
- *Working with Orthopedic Patients*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1982.

INFORMATION SHEET

PROVIDE FOR PATIENT MOVEMENT VIII

OBJECTIVE 1

Match terms associated with patient movement to their correct definitions.

- **Alignment** — Relationship of body parts to one another
- **Anemia** — Decrease in number of red blood cells and hemoglobin
- **Anorexia** — Loss of appetite
- **Atelectasis** — Collapse of portion of lung
- **Atrophy** — Wasting away of body part
- **Bedrest** — Confined to bed
- **Constipation** — Difficult or infrequent defecation
- **Contracture** — Fixed position of joint
- **Dangle** — To sit with feet hanging over side of bed
- **Decubitus ulcer** — A condition of the skin resulting from prolonged periods of pressure against an area
- **Embolus** — A blood clot or other foreign object which has moved from its original site and can become lodged in a smaller blood vessel
- **Fecal impaction** — Mass of stool retained in the colon
- **Footdrop** — Contracture of the foot and ankle in plantar flexion
- **Gait** — Manner of walking
- **Hypostatic pneumonia** — Pneumonia caused by pooling of secretions in lungs due to lack of movement
- **Immobility** — Without movement
- **Logroll** — To turn as a unit, keeping the spine in straight alignment

- **Mobility** — Movement
- **Orthostatic hypotension** or **Postural hypotension** — Significant fall of blood pressure when assuming an upright position resulting in dizziness or faintness
- **Osteoporosis** — Loss of bone density
- **Paralysis** — Inability to move
- **Phlebitis** — Inflammation of a vein
- **Position of function** — Maintaining joint in natural position or position where it may be used
- **Range of motion** — Amount of movement possible in a joint

  NOTE: The patient demonstrates *active* range of motion while the nurse moves the patient's joints through *passive* range of motion.

- **Renal calculi** — Formation of kidney stones
- **Restraint** — Device used to restrict movement
- **Safety device** — Appliance used to limit movement for protection of patient or others
- **Shearing force** — Combination of friction and pressure occurring when two layers of tissue slide in opposite directions
- **Thrombophlebitis** — Inflammation of a vein with blood clot formation
- **Thrombus** — A blood clot
- **Traction** — A system of weights and pulleys used to maintain alignment of the body
- **Venous stasis** — Pooling of blood in the veins

OBJECTIVE 2

Match terms associated with range of motion to their correct definitions.

- **Abduction** — Movement away from the midline of the body

- **Adduction** — Movement toward the midline of the body
- **Deviation** — Movement at the wrist toward the thumb or little finger; a type of abduction and adduction
- **Dorsal flexion** — Bending the wrist or ankle toward the elbow or knee
- **Eversion** — Movement at the ankle with the sole of the foot turning outward
- **Extension** — Straightening of a joint
- **External rotation** — Turning of a joint away from the body
- **Flexion** — Bending a joint
- **Hyperextension** — Movement of a joint beyond the point of extension
- **Internal rotation** — Turning of a joint toward the body
- **Inversion** — Movement at the ankle with the sole of the foot turning inward
- **Opposition** — The capacity of the thumb to touch each finger
- **Palmar flexion** — Bending at the wrist, placing the palm downward
- **Plantar flexion** — Bending at the ankle, placing the sole downward
- **Pronation** — Turning the palm downward
- **Rotation** — Turning of a joint
- **Supination** — Turning the palm upward

NOTE: See Supplement 1 for illustrations of terms.

OBJECTIVE 3 **Select benefits derived from exercise.**

Exercise, no matter how slight, helps to preserve body function. Our normal activities of walking, sitting, changing positions in a chair or bed, even though they may seem insignificant, actually play a major role in our physical well-being. Those who engage in more vigorous exercise such as jogging, aerobic work-outs, swimming, or other similar activities are maximizing the body's benefits.

Any movement stimulates the cardiovascular system. The heart rate is increased and the flow of blood through the blood vessels is increased. Movement acts as a kind of pumping action for the veins, stimulating the return of deoxygenated blood to the heart for re-oxygenation.

Movement increases the respiratory effort. The respiratory rate and depth increases and the lungs expand more fully. This causes the body to exchange oxygen and carbon dioxide faster.

Peristaltic movements of the gastrointestinal system are increased by body movements increasing the efficiency of digestion and elimination. The body's metabolic rate is also increased, causing the body to use stored carbohydrates and fats and increase the amount of heat production. All cell exchanges are increased.

Since the musculoskeletal system is the one most involved in movement, exercise certainly benefits it. Bone mass is preserved by active exercise and joint function is maintained by movement. Muscle mass and tone increase with exercise.

Exercise decreases pressure against skin and nerves. Pressure can cause pain and other problems.

In general, all systems work more efficiently with the increased blood flow, causing better exchange of nutrients and waste products.

Exercise provides a beneficial change of stimuli and increases the sense of well-being.

There are very real physiological and psychological benefits to exercise. Maintenance of normal movement helps to maintain optimum health.

OBJECTIVE 4 **Choose the best word or phrase to complete statements about factors that restrict mobility.**

Despite the important benefits of movement, we find many hospital patients and nursing home residents who have limited mobility.

The very fact that these people are in a health care setting probably means that their mobility is at least for a time, impaired.

We may see temporary immobility, for example, with a patient recovering from abdominal surgery. Temporary immobility of a longer duration could result from a fractured leg and the cast required for healing. Permanent immobility could result from paralysis after an accident severing the spinal cord.

We could also see varying degrees of mobility. The patient with a fractured leg has only one limb completely immobile. The paralyzed patient could have involvement of all extremities or only the lower extremities.

Basically we can divide the causes of immobility into three categories:

- Therapeutic restrictions — Those imposed for healing to take place
- Unavoidable restrictions — Those brought about by the condition itself
- Voluntary restrictions — Those in which the patient chooses not to move

Therapeutic restrictions

- Bed rest — Can help the recovery process by reducing the body's need for oxygen, by reducing pain associated with movement, or by allowing the patient to rest and regain strength.

  The nurse may see bed rest ordered in conditions such as congestive heart failure, thrombophlebitis, spinal cord trauma, muscle strains and sprains in the lower extremities, hepatitis, glomerulonephritis, terminal cancer, and some surgical procedures.

  The actual meaning of the term bed rest may vary with the health care facility. It might mean that the patient does not get up at all or it may allow the patient to get up to go to the bathroom. The term should be clarified so the nurse can give appropriate care.

- Casts
- Traction
- Monitoring devices

Unavoidable restrictions

- Paralysis, as in spinal cord injuries, cerebrovascular accidents, poliomyelitis, and other disorders
- Unconsciousness
- Extreme weakness, as in terminal cancer

Voluntary restrictions

- Depression
- Severe pain

No matter what the cause of immobility may be, the effects are the same and nursing intervention is necessary to prevent problems from developing.

OBJECTIVE 5

List problems related to immobility.

Immobility adversely affects many body functions and systems.

Cardiovascular system

When circulation is slowed, venous stasis, or pooling of blood within the veins, occurs. Specific disorders include:

- Orthostatic or postural hypotension
- Phlebitis
- Thrombus formation
- Thrombophlebitis
- Embolus

Respiratory system

Pooling of secretions and decreased lung expansion cause problems. Disorders include:

- Hypostatic pneumonia
- Atelectasis

Gastrointestinal system

The movement of the gastrointestinal system is slowed with immobility, affecting elimination and metabolism. Problems could include:

- Anorexia
- Constipation
- Fecal impaction
- Weight loss
- Obesity
- Changes in blood chemistry

Musculoskeletal system

Without movement, calcium leaves the bone and enters the blood stream. Muscle and joint function may be lost. Disorders include:

- Osteoporosis
- Muscle atrophy
- Contracture formation

Integumentary system

The skin suffers when pressure is exerted over an area for long periods of time, resulting in decubitus ulcers.

Urinary system

Urine tends to pool in the bladder. The calcium loss from the bone also contributes to problems in the urinary system. Problems could include:

- Urinary tract infection
- Renal calculi
- Incontinence

Psychological balance

Problems include:

- Sleep pattern disturbances including insomnia
- Sensory deprivation
- Depression
- Anger
- Self-centered outlook
- Decreased coping and problem-solving abilities

OBJECTIVE 6

Choose the best word or phrase to complete statements about nursing interventions that prevent or decrease the effects of immobility.

Since immobility presents so many problems, it is a real nursing challenge to keep the immobile patient problem-free. The nurse must be aware of the types of interventions needed to preserve maximum body function. These could be described as:

- **Range of motion exercises** — These help maintain muscle and joint function and also stimulate circulation. The exercises may be active, with the nurse encouraging the patient to move the joints through all possible movements; or they may be passive, with the nurse moving the joints when the patient is unable to do so. This type of intervention prevents muscle atrophy, contracture formation, and venous stasis. They may also promote a sense of well-being and increasing independence for the patient. The maximum amount of activity possible should be undertaken.

- **Positioning** — Frequent position changes prevent pooling of body fluids and the problems that accompany it. A change of position also relieves pressure against the skin. The immobile patient should be repositioned at least every two hours with care taken to maintain correct body alignment and to place body parts in a position of function. The patient who is able should be out of bed frequently.

- **Appropriate therapeutic devices** — Many therapeutic devices are available to aid in the care of the immobile patient. The nurse must be aware of their uses and choose those which would benefit individual patients. These will protect body function when used correctly.

- **Environmental stimulation** — Immobility can be a boring experience. The nurse can use a number of techniques to reduce the effects, such as talking with and listening to the patient, encouraging visitors, rearranging belongings or furniture to best suit the needs of the patient, encouraging a variety of activities, making the surroundings as pleasant as possible, and changing the surroundings by moving the patient to new surroundings when possible.

- **Patient and family teaching** — Patients and families often do not understand the need for interventions such as range of motion exercises and position changes. They may view them as an inconvenience and fail to cooperate. The nurse must stress the importance of continuing these interventions and explain the benefits to be gained and the complications to be avoided.

OBJECTIVE 7

Choose the best word or phrase to complete statements about therapeutic devices used to combat the effects of immobility.

A number of devices are available to help combat the effects of immobility. The nurse should use them or ask the doctor about their use whenever they seem appropriate in order to prevent complications and maintain function.

- **Anti-embolism stockings** — Prevent venous stasis in the legs. They are made of heavy elastic material which will exert pressure on the smaller superficial veins, forcing the blood to the larger, deeper veins for return to the heart. Knee-length or thigh-length stockings are available. Patients who will not be up walking will benefit from their use.

- **Athrombic pumps** — A variation of anti-embolism stockings that uses an electrically operated pump to intermittently inflate and deflate cuffs wrapped around lower legs or lower arms. This stimulates circulation. Patients who are confined to bed will benefit.

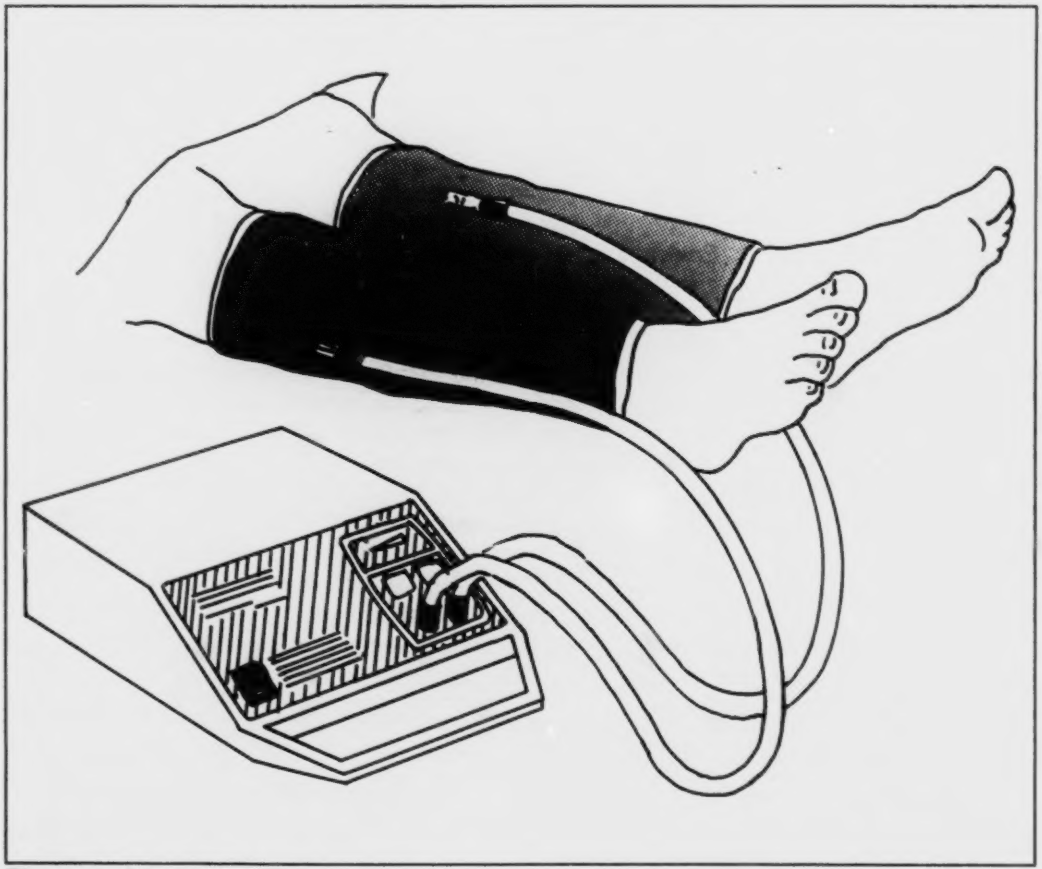

Figure 1 Athrombic pump

- **Bed boards** — Used to prevent the mattress from sagging. They are usually ordered for patients with a back injury. Those used in the hospital are jointed to conform to the gatch springs of hospital beds.

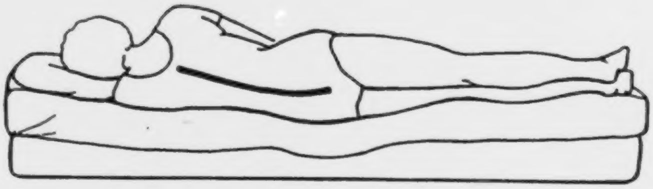

Figure 1 Without board*

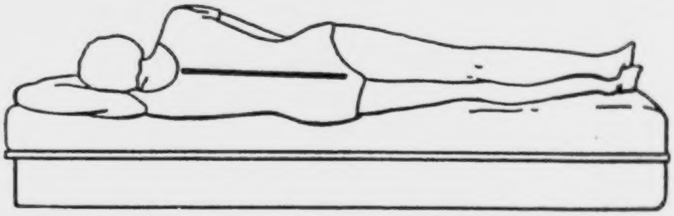

Figure 2 With board*

- **Siderails** — Can be utilized as aids in movement. The patient can be taught to use the siderails in positioning himself and in getting out of bed for ambulation.

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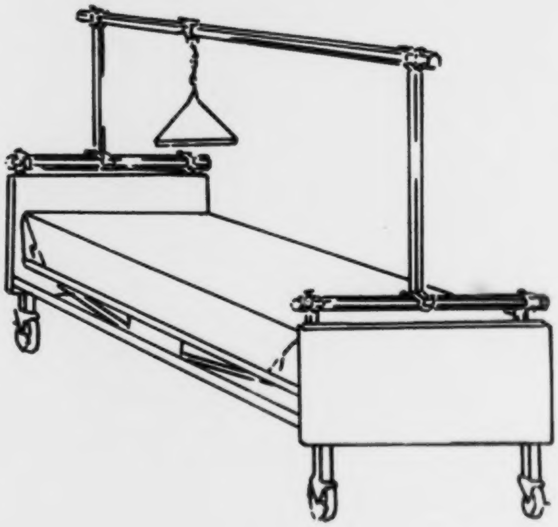
*Used with permission from Sorrentino; *Mosby's Textbook for Nursing Assistants*, 3rd edition, Mosby-Year Book, Inc. 1992.

- **Trapeze bars** — Attach to an **overhead frame** and will assist patients to move around in bed if mobility is impaired in the lower extremities, but they can move the upper extremities. This device allows exercise of the upper extremities and aids greatly in positioning the patient, especially during bedmaking and use of the bedpan.

Figure 3 Trapeze bar and Overhead frame*



- **Turning sheet** — A drawsheet positioned to aid in turning and repositioning an immobile patient. It makes the task easier for both the nurse and patient.

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- **Footboards** — Placed at the foot of the bed to aid in keeping the feet in proper position. When left unsupported, the feet tend to assume a position of plantar flexion. A contracture in this position is known as footdrop. Some footboards have attachments to also prevent external rotation of the hip.

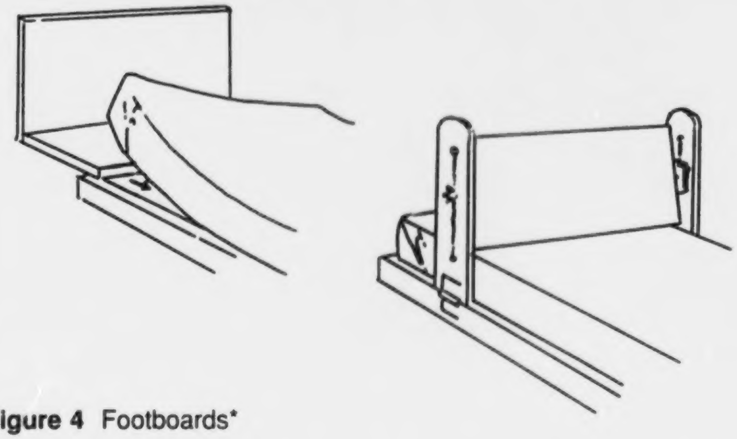

Figure 4 Footboards*

- **Bed cradles** — Devices that rest on the bed to keep the top covers from coming in contact with the patient. Some skin conditions such as burns and skin grafts may require this device.

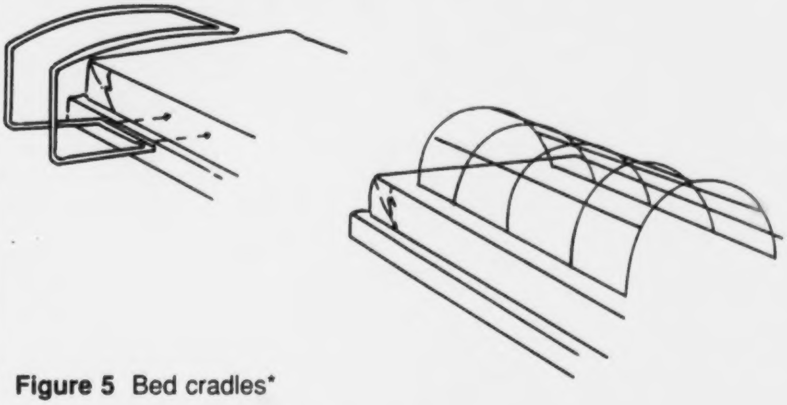

Figure 5 Bed cradles*

- **Sandbags** — Sand-filled vinyl containers that can be used to maintain body parts in correct alignment. They are usually long and narrow and can be laid alongside the leg to prevent either internal or external rotation of the hip.

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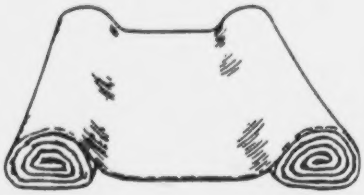
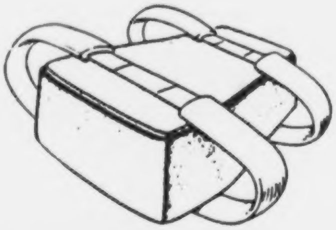
- **Trochanter roll** — A large towel or a sheet rolled up to fit against the thigh. The unrolled end is placed under the thigh with the rolled portion fitting tightly against the leg to prevent outward rotation of the hip.

Figure 6 Trochanter roll*



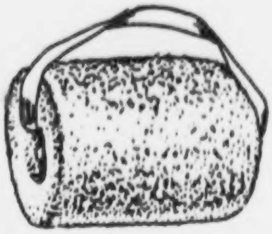
- **Abduction pillows or wedges** — Used to keep the legs in a position of abduction. This is especially important after surgical procedures of the hip.

Figure 7 Abduction pillow*



- **Hand rolls** — Used to keep the hand in a position of function. They may be commercially prepared devices or can be a rolled-up wash cloth placed in the hand to prevent a flexion contracture of the fingers.

Figure 8 Hand rolls*



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- **Splints** — Used to maintain alignment of the extremities. The wrist and fingers or the ankle are the joints most frequently targeted for splints. Splints are orthopedic devices specifically made for the individual patient.

- **Pillows** — May be used to prop the patient in the desired position or to support body parts. Pillows are very useful and when correctly placed can relieve pressure and maintain correct alignment.

- **Elbow and heel protectors** — Relieve pressure at sites especially at risk for skin breakdown. They are made of soft material such as foam or sheepskin. Foam protectors have the added advantage of preventing footdrop and external rotation of the hip.

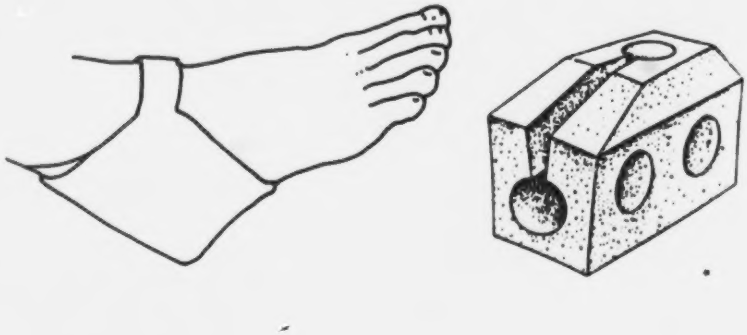

Figure 9 Heel protectors

- **Mattresses or pads** — Protect the skin from the effects of pressure.
  - An *egg crate* mattress is built of foam that resembles egg crates or cartons.

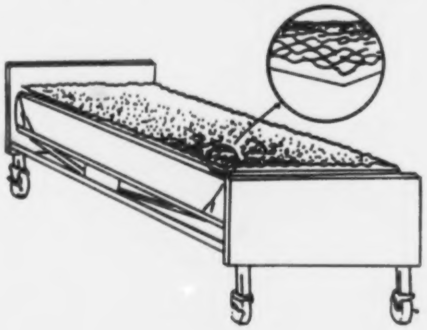

Figure 10 Egg crate mattress*

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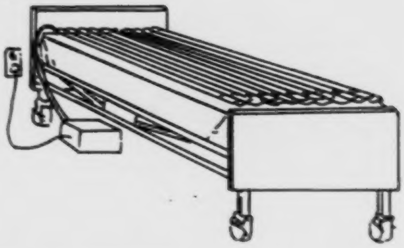
- An *alternating air pressure* mattress is made of vinyl and has channels that can be inflated with a pump. At intervals, the pump will allow some channels to deflate and others to inflate, changing the areas of pressure.

Figure 11 Alternating air pressure mattress[*]



- *Flotation* mattresses are filled with water or gel to decrease the pressure against body parts.

- *Foam* mattresses protect the skin from the effects of pressure.

The maximum effect of these mattresses or pads is achieved by covering them with a *single layer* of linen. Mattress pads may be placed under the special mattress to help hold it in position on the bed, but only a sheet should be placed over the special mattress or pad.

- **Bridging technique** — A method to keep pressure off a bony prominence such as the ankle or heel. The foot and lower leg could be positioned on foam pads with the ankle free from any pressure. The bridging technique could be used for the heel, using the edge of the mattress and a foot board as the supports.

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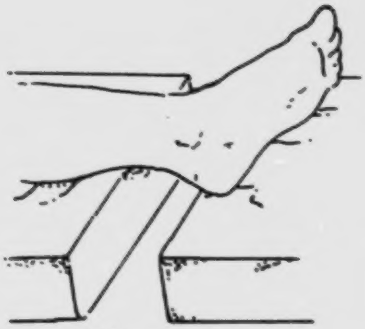


Figure 12 Bridging technique

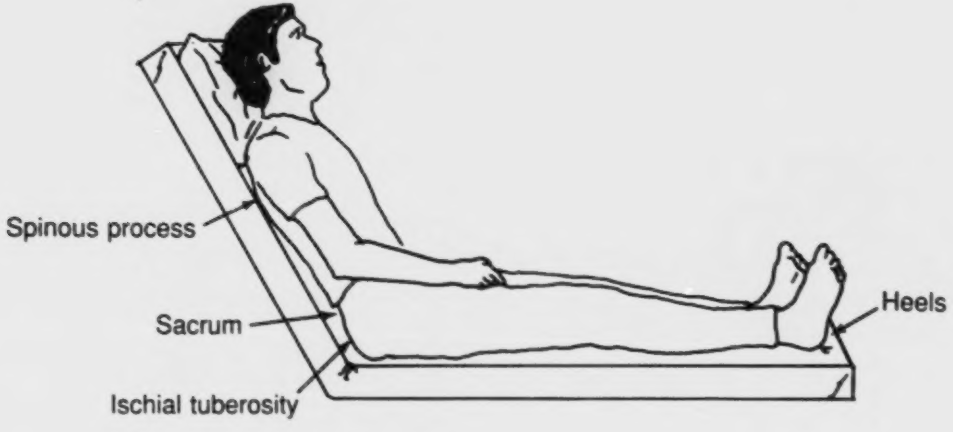
A number of *special beds* may be helpful for some immobile patients. Information on some of these may be found in Supplement 2.

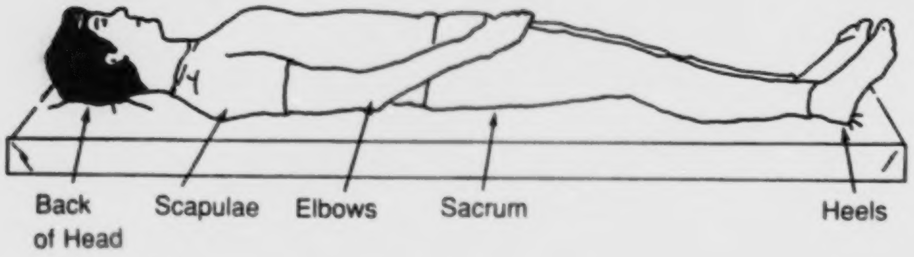
OBJECTIVE 8

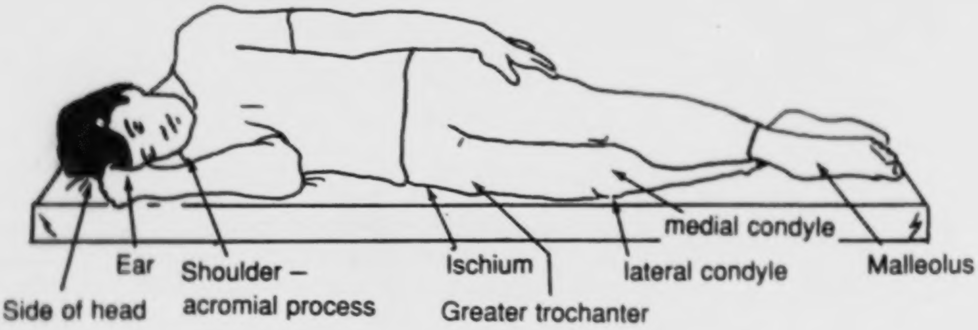
Choose the best word or phrase to complete statements about the risk factors in skin breakdown.

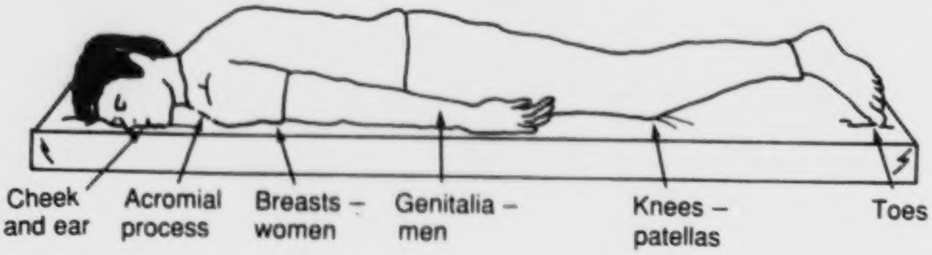
The skin suffers greatly during periods of immobility. This important first line of defense can break down, increasing the risk of infection. Decubitus ulcers occur all too frequently.

A decubitus ulcer is also known as a pressure sore or a bedsore. The primary cause of decubitus ulcers is pressure against the skin. Pressure interferes with circulation to the area, limiting the supply of oxygen and nutrients to the area and also the elimination of waste from the area. Pressure is greatest over bony prominences where there is little padding by overlying tissue and at other points frequently in contact with the bed or chair. See examples below and on the next page.




Back of Head
Scapulae
Elbows
Sacrum
Heels


medial condyle
Ear
Shoulder – acromial process
Ischium
lateral condyle
Malleolus
Side of head
Greater trochanter


Cheek and ear
Acromial process
Breasts – women
Genitalia – men
Knees – patellas
Toes

While pressure is the biggest factor in decubitus ulcer formation, other factors have been identified as contributing to the likelihood of a patient to develop the problem. These include:

- **Moisture** — Moisture may be in the form of urine, feces, perspiration, or wound drainage, but all can damage the skin. Improper drying after bathing could also be a factor.
- **Poor nutrition** — Poorly nourished individuals are at increased risk for skin breakdown because their bodies lack the necessary nutrients for growth and repair. A thin person has less padding over bony areas, increasing the effects of pressure.
- **Anemia** — Anemia may be related to nutrition or may be caused by some other disease condition. The risk of skin problems is increased because less oxygen is available to the tissues.
- **Body heat** — Fevers increase the body's demands for oxygen and nutrients. They may also increase perspiration, which is a form of moisture on the skin.
- **Friction and shearing force** — Friction refers to a rubbing action over the surface of the skin. Shearing force is a combination of friction and pressure occurring when two layers of tissue slide in opposite direction. Small blood vessels are caught between or "sheared" impairing circulation to the area. Either friction or shearing force can occur if careful technique is not used in repositioning patients.

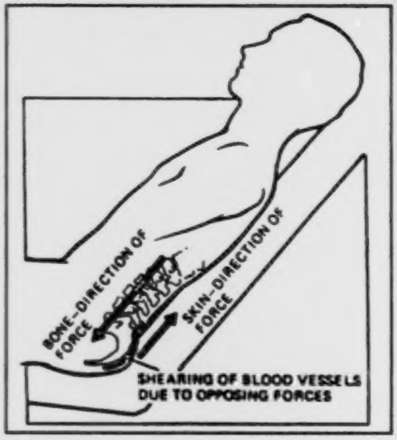


Figure 13 Friction and shearing force*

*Will Eighmy, *Being a Long-Term Care Nursing Assistant*, 3/E, © 1991, p. 149. Reprinted by permission of Prentice Hall, Englewood Cliffs, New Jersey 07632.

- **Irritating substances** — This category includes wrinkles in the linen, crumbs of food, or items such as silverware or combs pressed against the skin. All can cause damage.
- **Mental status** — A patient unable or unwilling to cooperate in measures to prevent skin breakdown makes the nurse's task more difficult.
- **Mobility** — The patient's ability to move is, of course, a big factor in skin breakdown. Movement on a regular basis does more than anything else to prevent skin problems.

See Supplement 3 for an assessment tool used to identify patients at risk for decubitus ulcers.

OBJECTIVE 9

Select methods to prevent decubitus ulcers.

Nurses must work continually to prevent decubitus ulcers from occurring. Refer to Supplement 1 for assessment, criteria, and treatments.

Nursing interventions include:

- **Frequent turning and repositioning** — Keep the patient off his back as much as possible. The prone position is a good one and should be used more often than it usually is.
- **Thorough skin care** — Skin care should include thorough washing, complete rinsing, and thorough drying. Special cleansers may be used to protect delicate skin. Massage with lotion will stimulate circulation and relieve dryness. When the patient is incontinent, skin care is extremely important.
- **Range of motion exercises** — Patients who cannot move themselves will have circulation stimulated by range of motion exercises. Pressure over sensitive areas such as the elbows, knees and heels will be relieved.
- **Use of therapeutic devices** — Elbow and heel protectors, special mattresses and pads, pillows, and use of the bridging technique will help prevent skin problems.
- **Attention to bedmaking** — A smooth, wrinkle free surface will keep the patient comfortable and free of skin irritation. Straightening the bed frequently, and especially after eating,

will help keep unwanted objects out of the bed. Water-proof materials should not be used since they may hold moisture close to the skin and increase perspiration. Wet or soiled linen and clothing should be changed promptly.

- **Avoid friction and shearing force** — Turning and positioning should be done carefully to avoid damage to the skin and underlying tissue. Use a turning sheet when possible.
- **Encouraging adequate nutrition** — Providing nutritious foods, and especially those high in protein, iron, and vitamin C, will help protect the skin. Provide encouragement and assistance as needed. Consider between-meal snacks to improve nutritional status.
- **Thorough skin assessment** — Assess all areas of the skin frequently to detect any changes. Reddened areas may appear with pressure, but should clear when pressure is relieved. Reddened areas should not be massaged, since this could increase tissue damage.

  NOTE: A reddened area which does not clear when pressure is relieved is considered to be a Stage I decubitus ulcer. (See Supplement 2)
- **Prevention — Prevention is the best treatment for decubitus ulcers. Preventative measures should be instituted for all patients at risk before any problems can develop.**

OBJECTIVE 10 **Label common body positions.**

There are five positions commonly used for patient comfort. A combination of positions should be used to prevent problems from developing.

Any of the positions require that:

- All body parts are placed in correct alignment
- Joints are well supported
- Joints are in a natural position or anatomical position (frequently called a position of function or position of use).

Positions should be changed at least every two hours. Many patients would benefit from more frequent changes. A combination of pillows and pads will aid in making the patient comfortable as well as maintaining alignment and function.

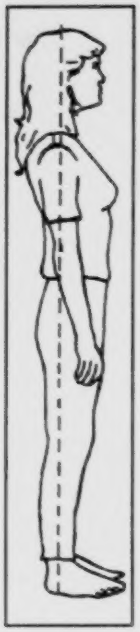


Figure 15 Proper alignment

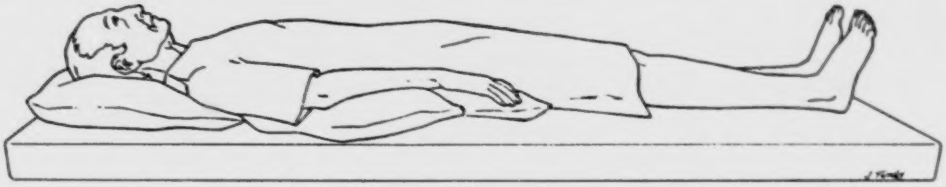


Figure 16 The **supine** position* (Also called dorsal recumbent, decubitus, back-lying)

NOTE: A pad or pillow may be used under the knees, but it should be a very small one to avoid unnatural flexure.

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*Used with permission from Sorrentino; *Mosby's Textbook for Nursing Assistants*, 3rd edition, ©1992, Mosby-Year Book, Inc.

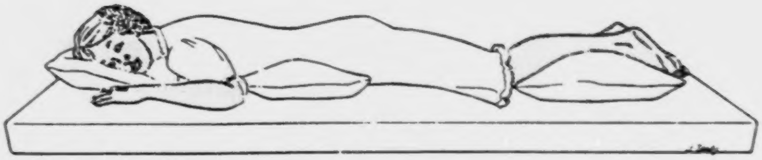

Figure 17 The **prone** position*

This position removes all pressure from the back. Small pads and pillows should be used under the abdomen to relieve pressure from the female breasts and the male scrotum. This is the only position which allows for complete extension of the hips. Patients with respiratory or cardiac problems may not be able to assume this position because it limits chest expansion. Patients with back problems or those who have had abdominal surgery may also be uncomfortable.

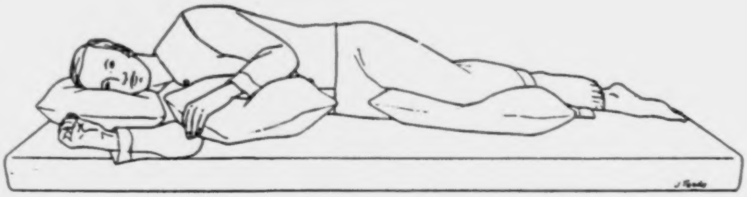

Figure 18 The **lateral** position* (Also called the side-lying position)

NOTE: The upper arm and leg should be well-supported.

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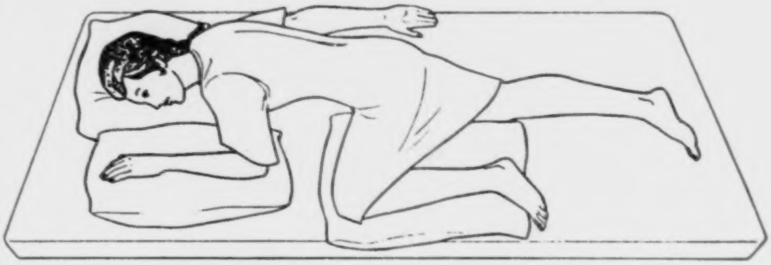


Figure 19 The **Sim's** position* (Also called semi-prone position)

NOTE: This position is between the lateral and prone positions. The lower arm is extended backward. The upper arm and legs should be supported. This position may be used for enemas and examinations of the colon or perineal area.

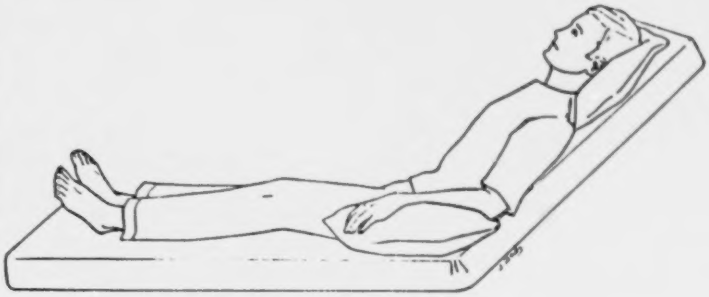


Figure 20 The **Fowler's** position*

NOTE: The knees may or may not be flexed. Some hospital beds automatically flex the knees when the head is raised.

*Used with permission from Sorrentino; *Mosby's Textbook for Nursing Assistants*, 3rd edition, ©1992, Mosby-Year Book, Inc.

A variety of terms may be connected with this position.

- Low Fowler's may mean an elevation of 15-45 degrees.
- Mid-Fowler's may mean an elevation of approximately 45 degrees
- High Fowler's may mean an elevation of approximately 90 degrees. (Actually most hospital beds do not elevate to a full 90 degrees).
- Semi-Fowler's may mean an elevation of 15-45 degrees *or* it may mean a sitting position with the knees flexed.

Clarify terms in the facility where they are being used.

Some patients will require pillows at their sides to prevent them from falling to the side.

OBJECTIVE 11

Select from a list patients at risk for falls.

Many health care facilities are instituting fall prevention programs to avoid the pain, anxiety, and expense which can accompany a fall. They include patient assessment to determine the likelihood of suffering a fall, appropriate nursing interventions, and patient and family teaching on fall prevention. Some institutions use a point system or scale for the assessment.

Factors which have been found to predispose patients to falls include:

- Age 65 or older
- Preschool or younger
- Disorientation
- Unattended
- History of falls
- Recent history of loss of consciousness or seizure disorder
- Unsteadiness on feet

- Poor eyesight
- Poor hearing
- Drug or alcohol problem
- Medication causing sedation
- Language barrier
- Display of resistant, belligerent, combative or fearful attitude
- Postural hypotension

Patients in these categories or other criteria at a particular facility may be identified by special armbands, bed or door signs, and notations on the Kardex and other lists supplying information to the staff.

OBJECTIVE 12

Select from a list nursing interventions for preventing falls.

- Place the patient in a room near the nurses' station.
- Orient the patient to the room including the call light.
- Check on the patient frequently.
- Offer assistance in getting up to the bathroom or provide the bedpan or urinal on a frequent basis.
- Provide adequate footwear.
- Instruct in the use of hand rails and safety bars.
- Keep the bed in the low position with wheels locked.
- Answer call lights promptly.
- Keep the pathway to the bathroom unobstructed.
- Teach safe transfer techniques.
- Provide a night light.

- Keep all necessary items within reach, especially the call light.
- Instruct the patient to sit before standing and to stand still before walking.
- Make sure wheelchairs, walkers, canes, and crutches are in good repair.
- Make sure patients wear glasses or hearing aids.
- Encourage the patient to call for help when needed.
- Set bed exit alarms when available.
- Use siderails as indicated.
- Keep crib rails up.

OBJECTIVE 13 **Identify safety devices.**

Safety devices that limit movement must sometimes be provided for the patient's protection. If this becomes necessary, it is important to choose the right one. The device should cause the least amount of restraint required for the situation.

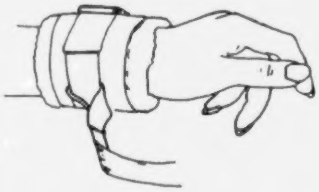


Figure 21 Limb type
(Wrist or ankle)

NOTE: Many have foam or sheepskin padding to avoid injury to bony prominences.

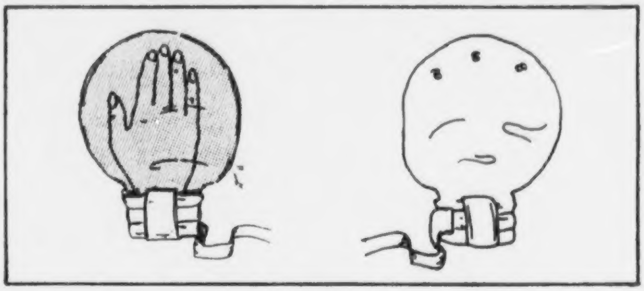


Figure 22 Mitten type

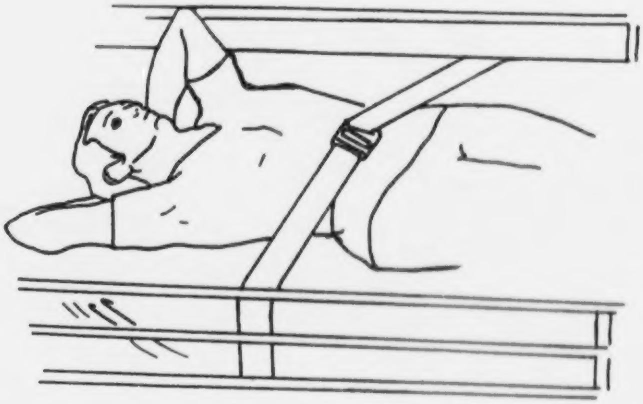


Figure 23 Waist or belt type

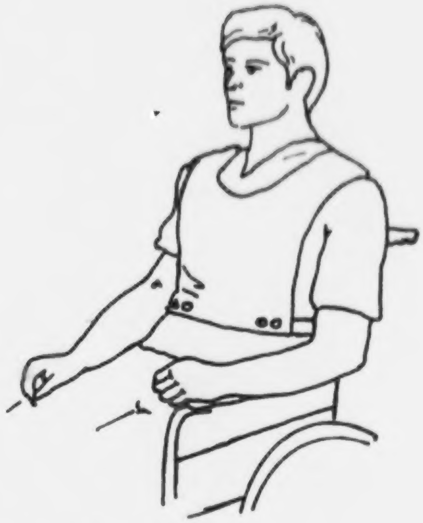


Figure 24 Vest or jacket type

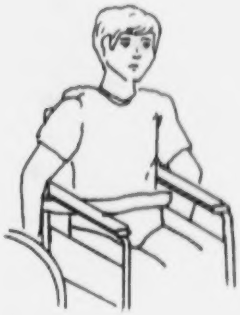


Figure 25 Crotch type

OBJECTIVE 14

Choose the best word or phrase to complete statements about the nursing process when safety devices are indicated.

It is estimated that one in five hospitalized patients and over 30% of nursing home residents have some form of safety device used during their stays. This practice seems peculiar to the United States. Other countries report much lower numbers. Current thinking calls for reducing the use of such measures. Federal guidelines for nursing homes call for such limitation.

ASSESSMENT AND ANALYSIS

Commonly, indications for the use of safety devices include:

- Prevention of falls
- Maintenance of medically necessary equipment (IV lines, tracheostomy tubes)
- Protection of the patient (scratching, pulling out catheters)
- Protection of others from an abusive patient

The emphasis should always be on protecting the patient and/or preventing injury.

When safety devices are considered, the cause of the underlying problem, along with possible alternatives should be considered first. Searching for possible problems would include:

- Trying to discover the cause of agitation. This could be:
  - Pain
  - Frustration in communicating needs
  - Upsetting noise level
- Trying to discover the cause of confusion. Consider:
  - Unfamiliar surroundings
  - Unfamiliar people
  - Infection
  - Electrolyte imbalance
- Considering the need for more movement
- Identifying the risk for falls

Possible alternatives to the problems would include:

- Calming measures such as
  - Talking in a soothing manner
  - Playing quiet music
  - Offering warm fluids
  - Reassuring him that his problems are important
  - Moving to a quieter room
- Eliminating confusion by:
  - Arranging for family members to be with him
  - Orienting him to surroundings
  - Arranging for familiar objects to be present
  - Providing a night light
- Providing the maximum amount of movement allowed by:
  - Allowing an ambulatory patient to walk in a safe, enclosed area
  - Helping the nursing home resident find his own room by means of some identification on the door, such as a colored sign or bow
  - Assisting those who cannot walk by themselves
- Instituting fall prevention measures

Agitation and confusion are usually transient problems, but the use of safety devices may compound them and prolong the problem. There are other risks as well. The imposed immobility could cause contracture of the joints, muscle atrophy and pressure areas on the skin. Dehydration can result when the patient cannot take fluids as he wishes. Incontinence may develop when the patient cannot go to the bathroom as needed.

The nurse should also check for any nursing diagnoses which might explain possible problems or indicate a need for safety devices.

Complete assessment of the problem should be documented, along with any alternative interventions attempted to alleviate the problem.

PLANNING

Institutions should have written policies concerning the use of safety devices. Doctor's orders for maintenance of safety devices are usually required. Written consent by a responsible party may be required.

The least restrictive type of safety device should be chosen. Only one type of device should be used at a time.

Give a complete explanation of why the device is used and what it does to the patient and family member. Safety devices should never be presented as punishment, but always for the protection of the patient. Plan to remove them as soon as possible and explain this to the patient and family.

Plans should be formulated for caring for the patient requiring safety devices. These should take into consideration measures for overcoming the effects of imposed immobility.

IMPLEMENTATION

Place the patient in correct body alignment with joints in a position of function.

Use extreme care in immobilizing the patient on his back due to the danger of aspiration of fluids.

Do not fasten safety devices too tightly. The nurse should be able to insert two fingers under the device.

Pad bony prominences before applying limb-type devices.

Check for adequate circulation and respirations.

Tie safety devices to the bed frame, not the siderails.

Tie safety devices in a manner so that the device will not get tighter on the patient and it may be quickly loosened if necessary.

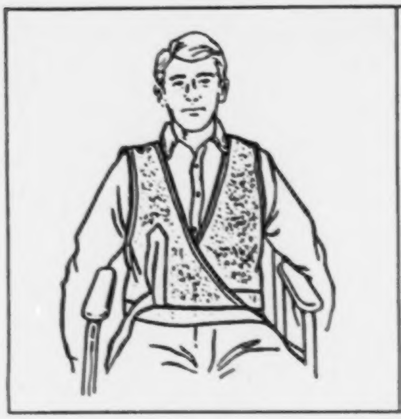
Provide fluids frequently and food at mealtimes.

Loosen the safety devices at least every two hours. Provide range of motion exercises. Provide opportunities for elimination. Provide access to call system.

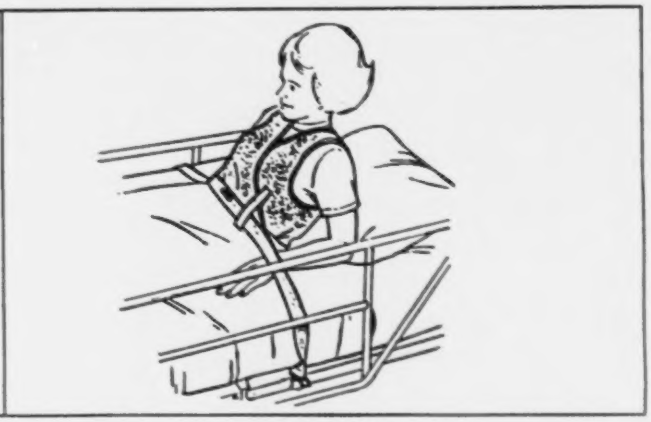
Document all actions in relation to the safety devices completely and on a regular basis. Interventions to decrease the effects of immobility should be clearly indicated. The condition of the skin and circulatory status should be included.

Additional safety information about safety devices appears on the next page.

IMPORTANT SAFETY MESSAGE!

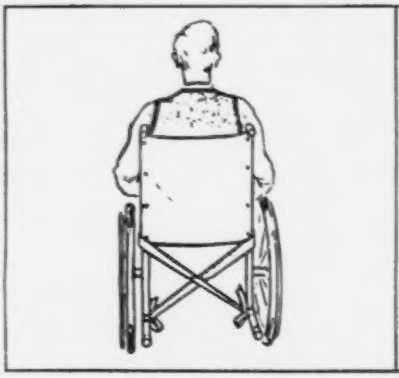


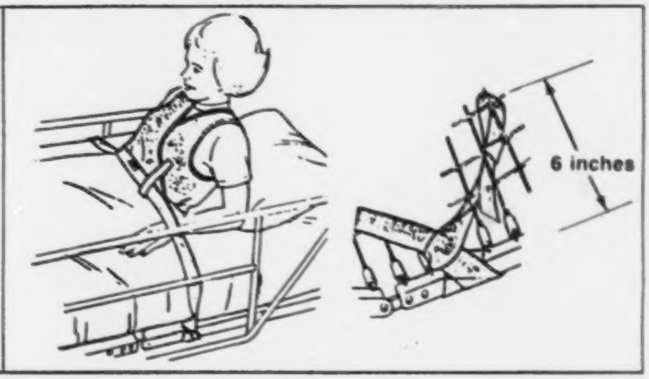
Safety Vest



Budget Vest

1. All vests similar in design to those illustrated above must criss-cross in FRONT.
2. Criss-crossing these vests in back can cause serious injury or death.





3. To minimize risk of inadvertent release which could cause injury, secure straps out of patient's reach as shown above. Straps should be secured:
   —to the movable part of spring frame for bed application.
   —to wheelchair kickspurs or geriatric chair frame for chair applications.

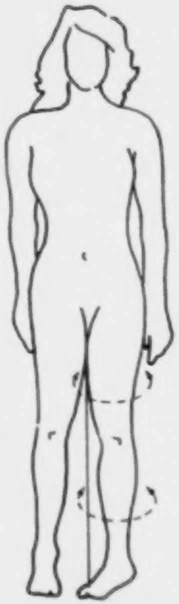
*Used with permission of J.T. Posey Company, Arcadia, CA.

EVALUATION

Frequently evaluate the need for continuing the safety devices. Determine whether they are providing a safe environment for the patient or if they are creating additional problems. The goal should always be to discontinue the devices as soon as possible. Determine whether this goal has been met.

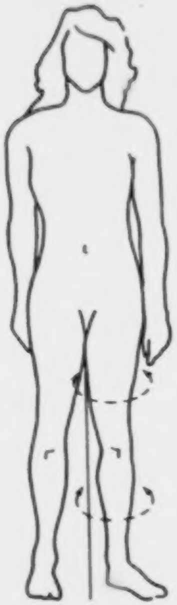
Range of Motion General Terms

Internal Rotation

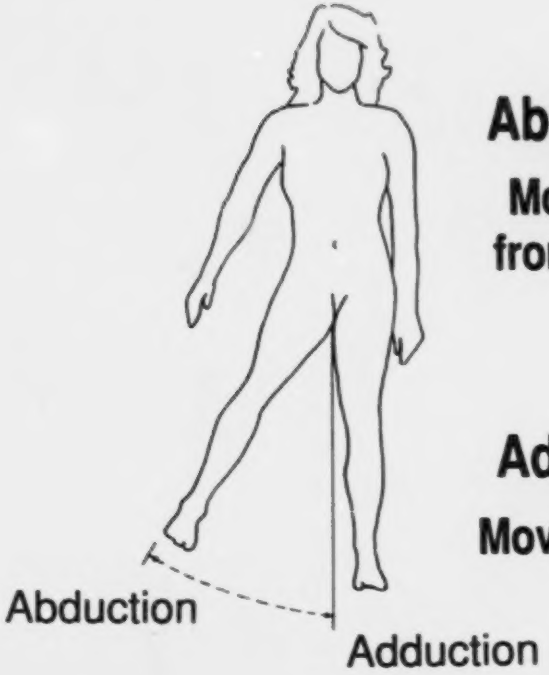


Turn/Roll Toward Midline

External Rotation



Turn/Roll Away from Midline



Abduction

Move Away from Midline

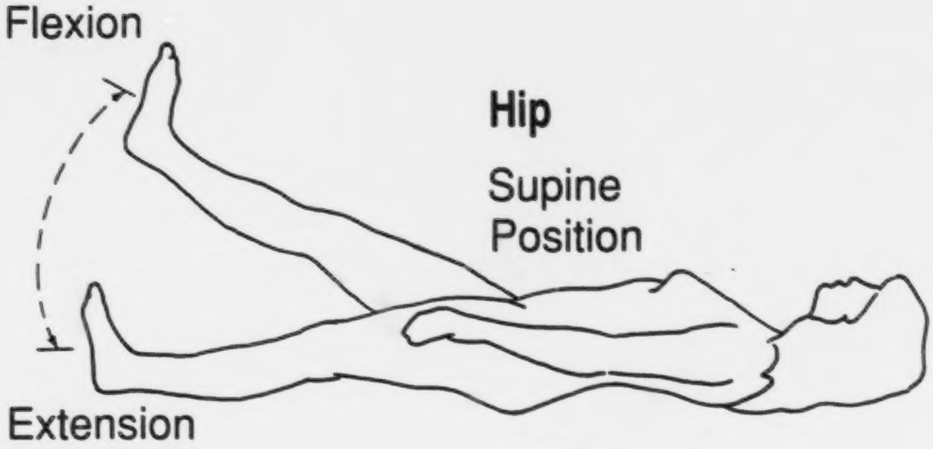
Adduction

Move Toward Midline

Range of Motion General Terms

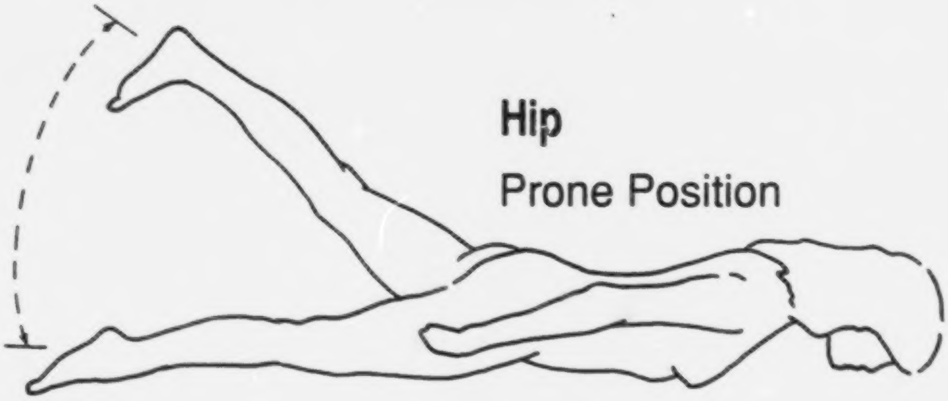
Flexion/Extension

(Bending/Straightening)


Flexion
Hip
Supine
Position
Extension

Hyperextension

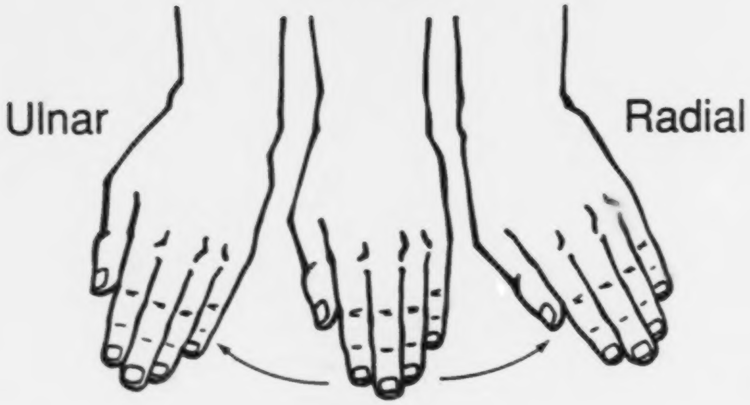
Moving Back
Beyond Straight Line

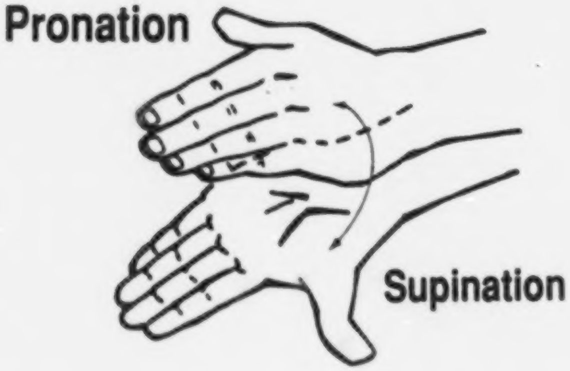

Hip
Prone Position

Normal Range of Motion Specific Terms

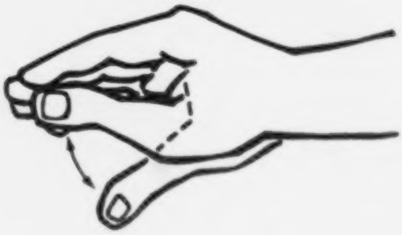
Upper Extremities

Deviation

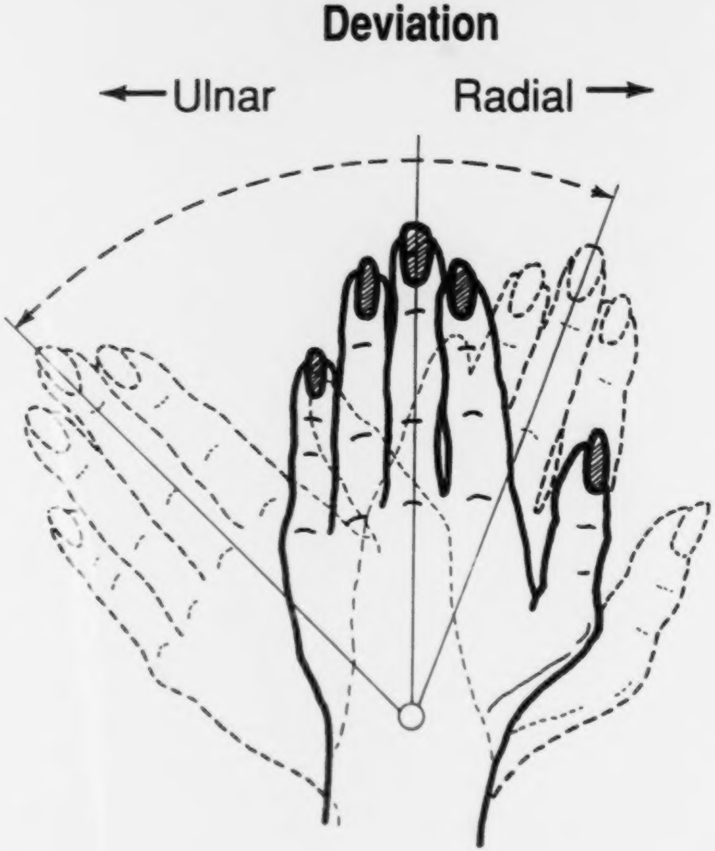

Ulnar
Radial

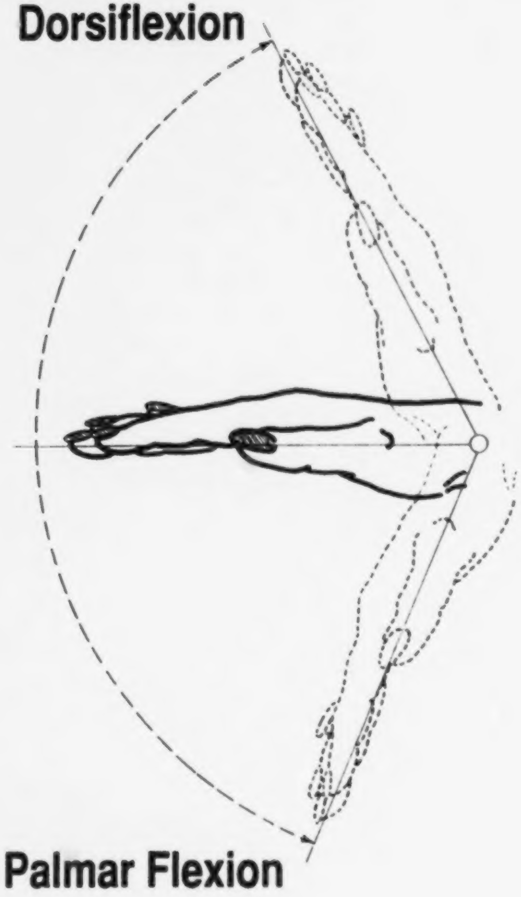

Pronation
Supination

Opposition



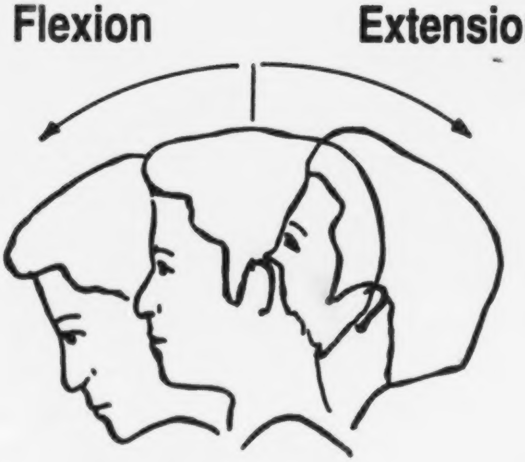
Normal Range of Motion – Wrist


Deviation
← Ulnar
Radial →

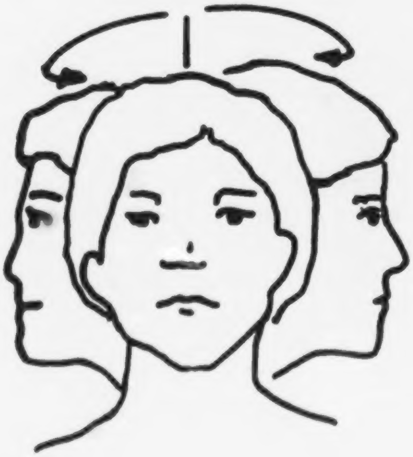

Dorsiflexion
Palmar Flexion

Normal Range of Motion

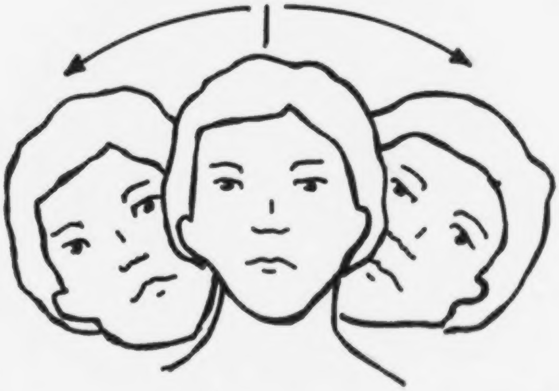
Cervical


Flexion
Extension

Rotation

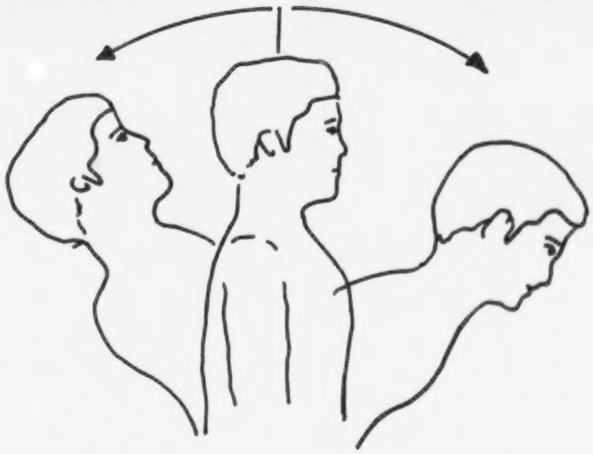


Lateral Flexion

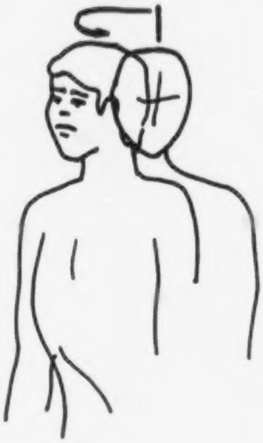


Normal Range of Motion

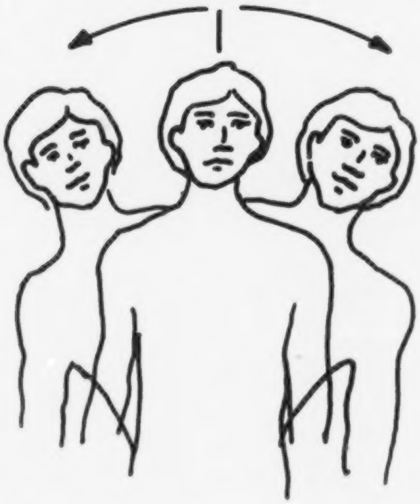
Thoracic and Lumbar



Extension Flexion



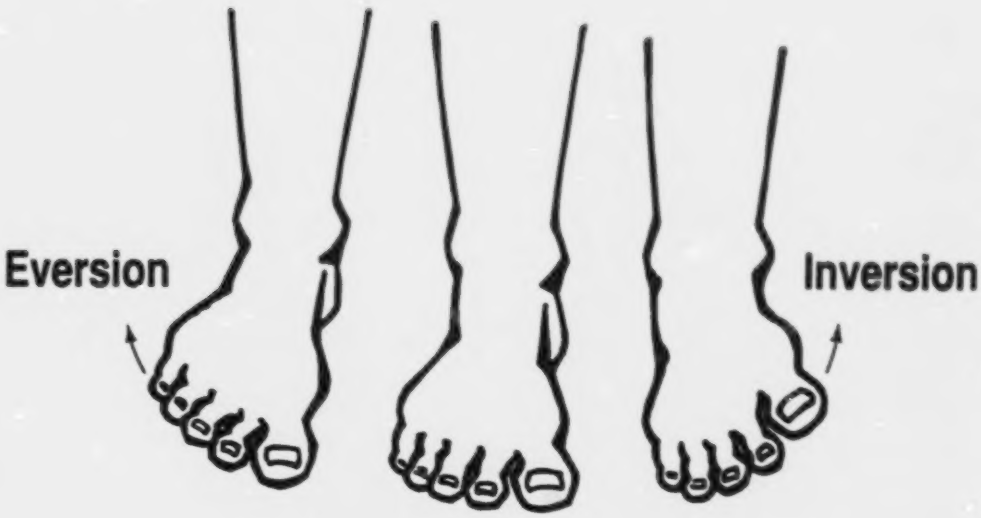
Rotation

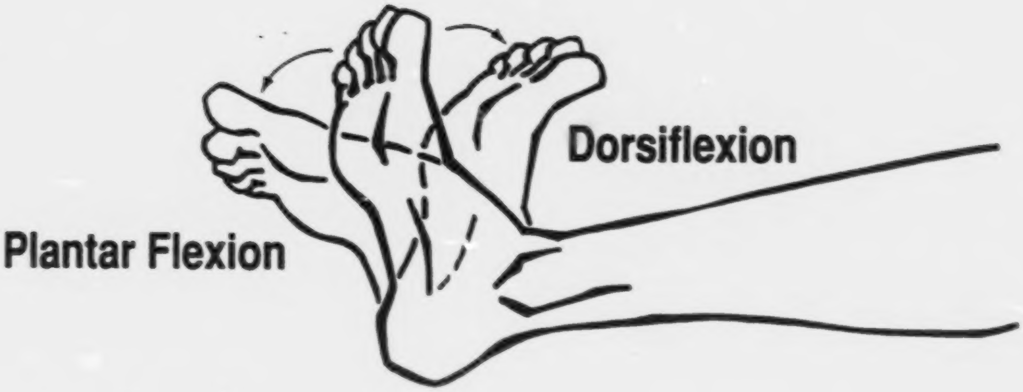


Lateral Flexion

Normal Range of Motion Specific Terms

Lower Extremities


Eversion
Inversion


Dorsiflexion
Plantar Flexion

SPECIAL BEDS

Nurses today are fortunate to have a number of therapeutic beds to aid in treating immobile patients. The beds have special features to help with special problems.

Air fluidized beds are tub-like beds filled with tiny ceramic beads. Air circulates through the beads, providing a very soft surface with a minimum amount of pressure. Patients with conditions affecting the skin and edema can benefit from this bed. The Clinitron bed is an example of this type.

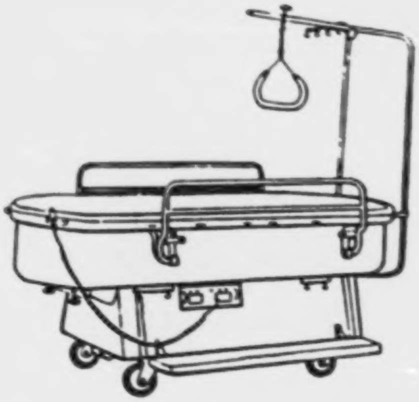


Figure 26 Air fluidized bed*

Static, low air loss beds are made up of many air-filled cushions. Different sections can be inflated to different pressures. These are wonderful when pressure needs to be at a minimum. The Flexicair bed is an example of this type.

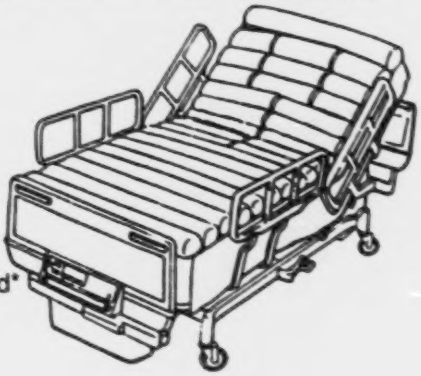


Figure 27 Static, low air loss bed*

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*Used with permission of Daniel S. Beisel, Medical Art Design, Ellicott City, MD.

Active, low air loss beds are similar, but add movement to the air-filled cushions. This makes it a good choice for patients with respiratory involvement like pneumonia. Body fluids are moved without the patient actively moving. The BioDyne bed is such a bed.

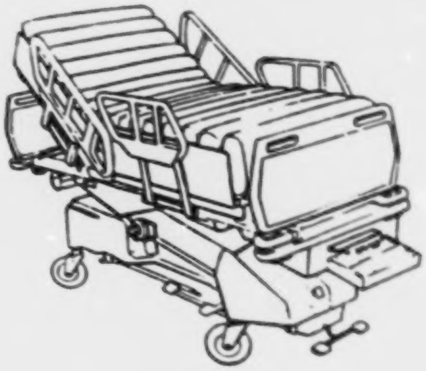

Figure 28 Active, low air loss bed*

Rotation beds also provide movement to stimulate body functions. The movement is a slight side to side movement. Hatches under the bed can be removed for access to the patient. The RotoRest bed is one of these types.

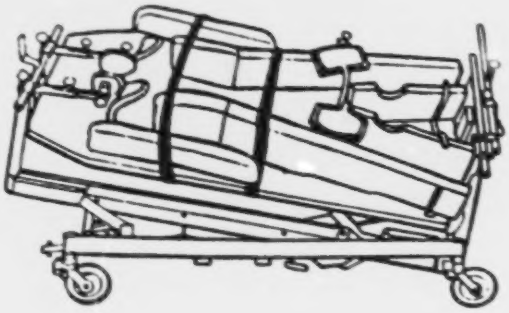

Figure 29 Rotation bed*

*Used with permission of Daniel S. Beisel, Medical Art Design, Ellicott City, MD.

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PRESSURE SORE RISK ASSESSMENT

Various researchers at different times have developed assessment tools to be used in identifying patients at risk for decubitus ulcer formation. The Braden Scale for Predicting Pressure Sore Risk is one of the newest of these tools. It involves evaluating six factors:

- **Sensory perception** — Related to the patient's ability to feel pressure and pain. An individual who cannot feel discomfort is not going to move or ask to be moved.
- **Activity** — Related to the amount of movement the person demonstrates.
- **Mobility** — Reflects the ability to move.
- **Moisture** — Includes exposure of the skin to moisture of any type, including urine, feces, perspiration, wound drainage, or moisture applied from the outside.
- **Friction** — This factor is examined in terms of the patient's ability to move independently or to be moved by others. The second alternative would, of course, increase friction and shearing force.
- **Nutrition** — Here the overall amount of intake is considered, including dietary supplements and IV intake.

Each factor is rated and a numerical value obtained which reflects the likelihood of skin breakdown. The mere knowledge of such rating factors helps the nurse consider the potential for skin breakdown of each patient and then to take steps to avoid it.

ASSESSMENT AND TREATMENT OF DECUBITUS ULCERS

The most important aspect of treatment for pressure sores, or decubitus ulcers, is prevention. However, if the skin does break down, other measures need to be used. There are considered to be four stages of a decubitus ulcer. Treatment would vary with the stage.

Stage I consists of redness of the skin. If the redness does not fade when pressure is removed, the lesion is considered to be a Stage I decubitus ulcer. This reddened area should not be massaged, since massage would only cause further damage. The epidermis is involved.

Stage II includes redness with edema or a blistered area. The dermis is involved.

Stage III involves a break in the skin with subcutaneous tissue exposed. This is the "ulcer" which gives the lesion its name. Subcutaneous tissue is involved.

Stage IV involves all layers of the skin and may even involve bone. Danger of infection is great.

NOTE: Wounds cannot be staged if base of wound is not visible as may be the case if it is covered by eschar or necrotic tissue.

Relief of pressure is the first order of treatment for all stages. However, in relieving pressure on this area, prolonged pressure should not be placed on other areas. Frequent changes are needed and the patient may need to lay on the decubitus ulcer sometimes.

It has been found that a moist environment speeds healing. There are a number of products which provide a covering for the area and keep it moist to promote healing. For Stages I and II, transparent film products with names like Op-Site and Tegaderm may be used. DuoDerm and other similar products also adhere to the wound, but provide more moisture and a greater barrier. Doctor's orders guide treatment.

As the lesion becomes deeper as in Stages II or III, fillers or gels such as DuoDerm granules or Vigilon may be used. In all of these products, the wound stays moist and in fact may look infected, but the material in the wound is aiding healing.

Stage III or IV decubitus ulcers may develop a layer of eschar which has the appearance of a heavy black scab. This must be removed for healing. This removal or debridement may be done with chemicals like Elase, by whirlpool or by surgical debridement.

Various preparations like povidone-iodine (Betadine), hydrogen peroxide or hexachlorophene may be used to clean open wounds. A variety of substances have been applied to open wounds including antibiotic ointments, zinc oxide and even sugar. Ultrasound treatments and concentrated application of oxygen may be used. Large wounds may be packed with gauze and kept moist.

In the past, heat lamps and wet to dry dressings have been used, but these are not currently preferred treatments. These leave the wound dry instead of moist.

There are a variety of treatment methods, but the best course is to avoid the need for treatment with prevention.

TRANSPORTING A PATIENT IN ISOLATION

INTRODUCTION

Even though a patient may require isolation precautions, he still will need a number of other nursing procedures completed. Some variation may be necessary in order to maintain the isolation precautions. The exact measures will depend upon the organism and disease being isolated. Generally, the following measures are for the strictest of isolation procedure.

EQUIPMENT

- Isolation cart [outside door containing gowns, masks, gloves, isolation bags (usually red), fasteners for bags, labels, marking pen]
- Wheelchair
- Sheets or bath blankets

PROCEDURE

Assessment and Analysis

1. Check medical and nursing diagnoses to determine the exact type of materials needed and specific needs of the patient.

2. Check agency policy manual to determine specific procedures.

Planning

3. Assemble all equipment.

   NOTE: Be certain all necessary items are present to avoid coming back out of isolation unit.

Implementation

4. Place gown and mask on patient.

5. Place clean sheet or bath blanket over wheelchair or stretcher.

6. Place second sheet or blanket, completely opened, over first. Place patient in wheelchair or stretcher and wrap as completely as possible with second blanket.

7. Make sure people in department where patient is being transported are aware of patient's diagnosis and isolation precautions.

8. Arrange for transport at a time when the patient will not come into contact with a large number of people.

9. Upon the patient's return, place linen in receptacle in room.

10. Follow agency policy concerning disinfection of wheelchair or stretcher.

Evaluation

Evaluate using the following criteria:

a. Care was given without contaminating persons or equipment.

b. All contaminated materials were discarded or removed from unit using double-bagging technique.

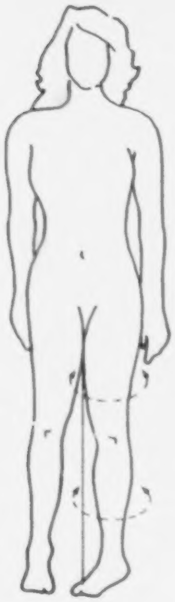
c. Patient is comfortable and isolation unit is neat and clean.

Documentation

Follow agency policy in documenting each procedure as appropriate.

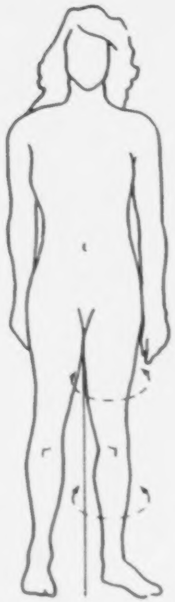
Range of Motion General Terms

Internal Rotation

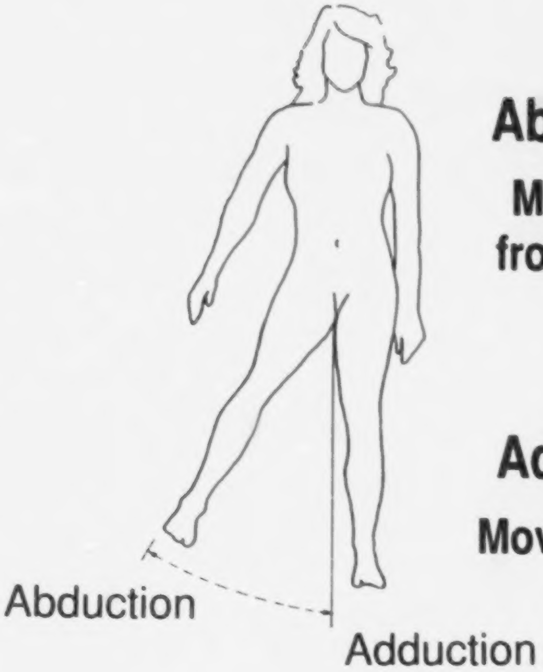


Turn/Roll Toward Midline

External Rotation



Turn/Roll Away from Midline



Abduction

Move Away from Midline

Adduction

Move Toward Midline

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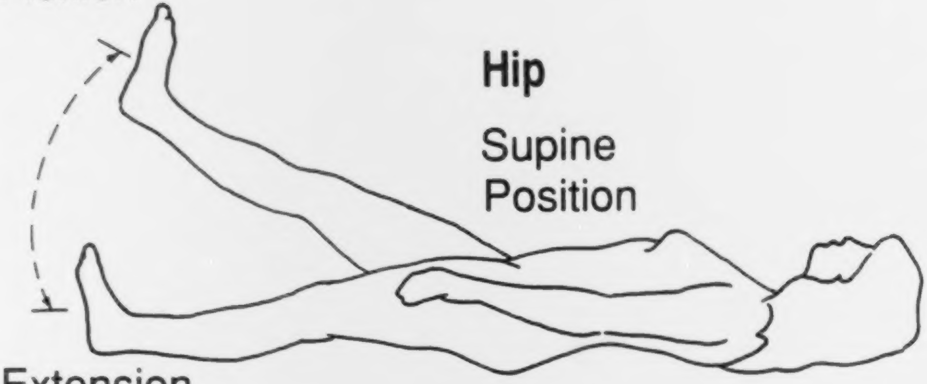
TM 2

Range of Motion General Terms

Flexion/Extension

(Bending/Straightening)

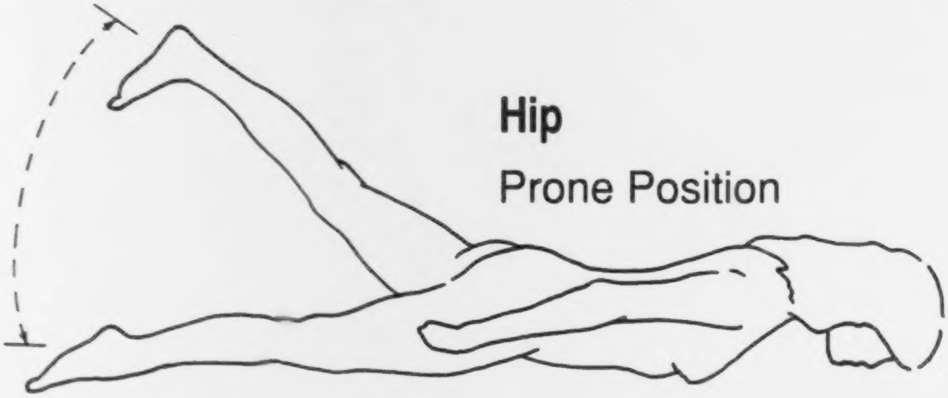


Hip

Supine
Position

Hyperextension

Moving Back
Beyond Straight Line

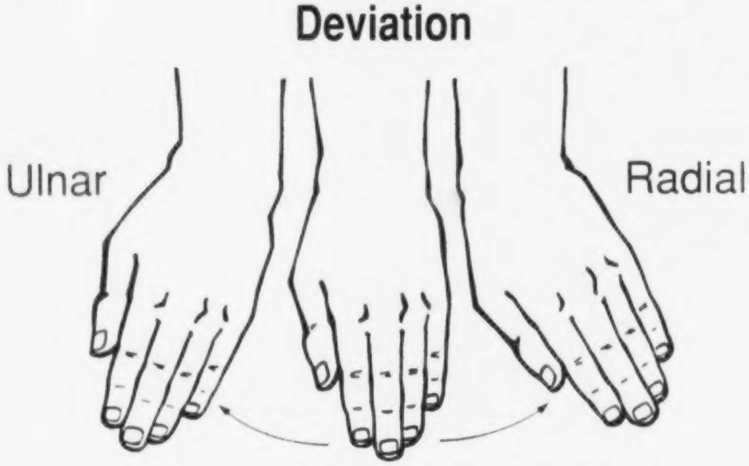


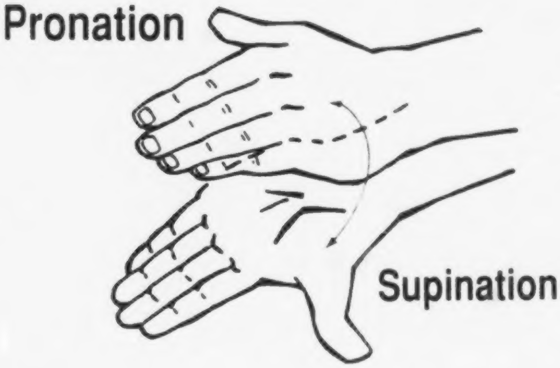
Hip

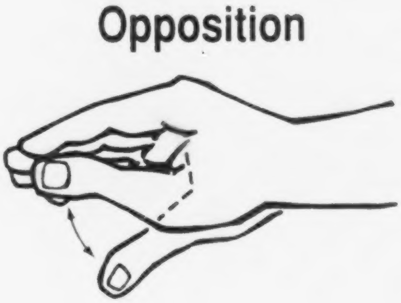
Prone Position

Normal Range of Motion Specific Terms

Upper Extremities

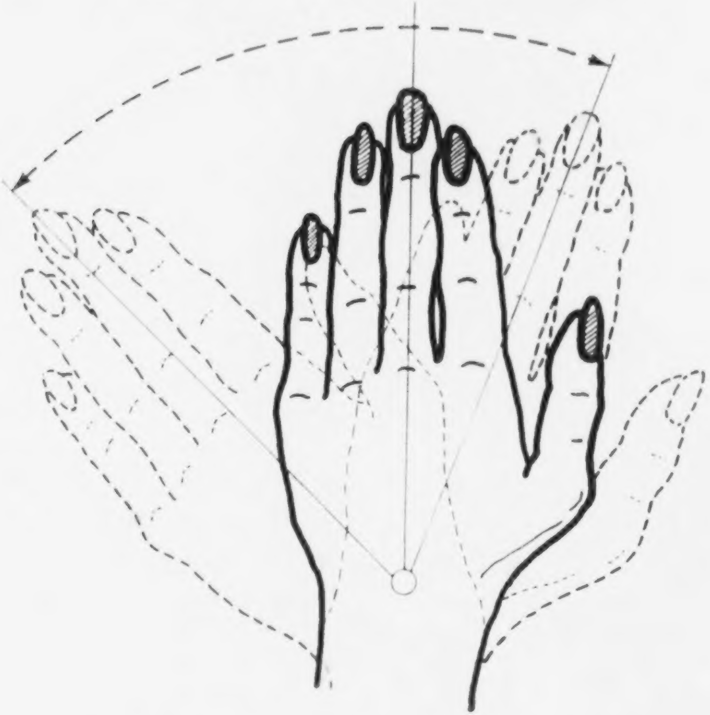

Deviation
Ulnar
Radial


Pronation
Supination


Opposition

930

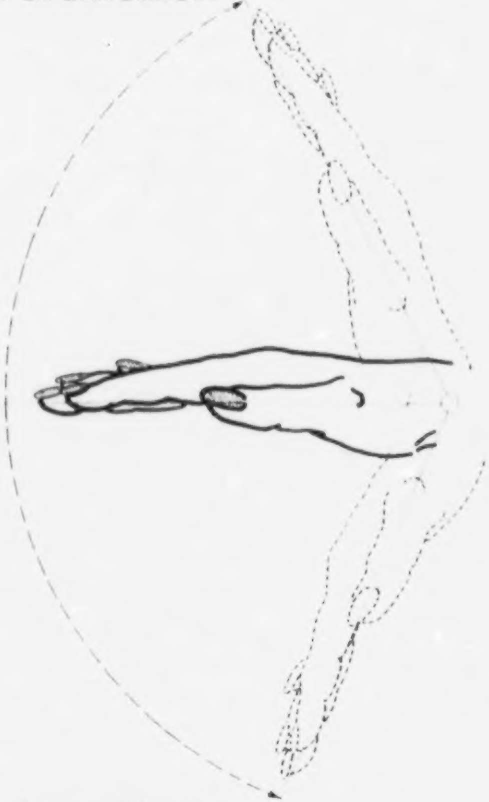
Normal Range of Motion – Wrist



Deviation

← Ulnar

Radial →



Dorsiflexion

Palmar Flexion

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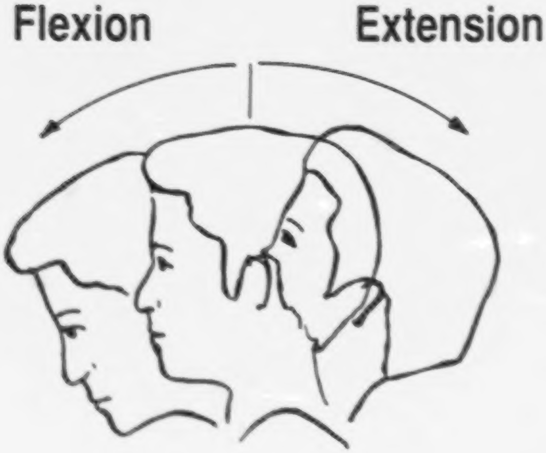
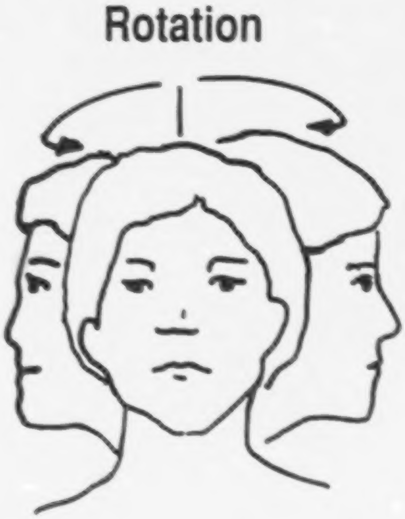
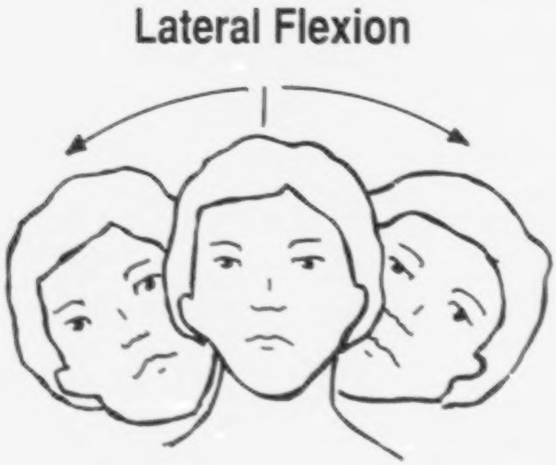
Normal Range of Motion

Cervical

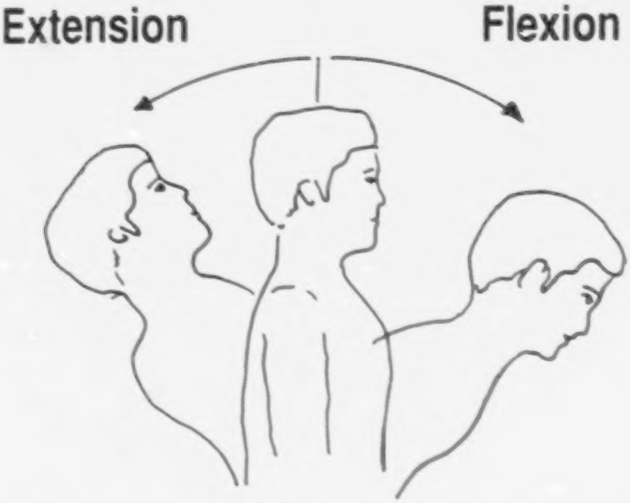

Flexion
Extension

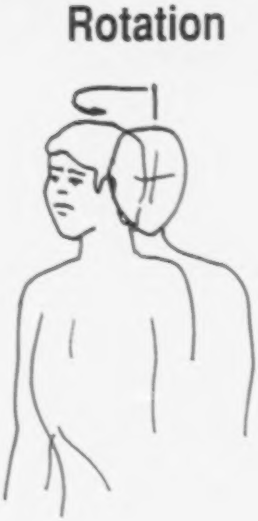


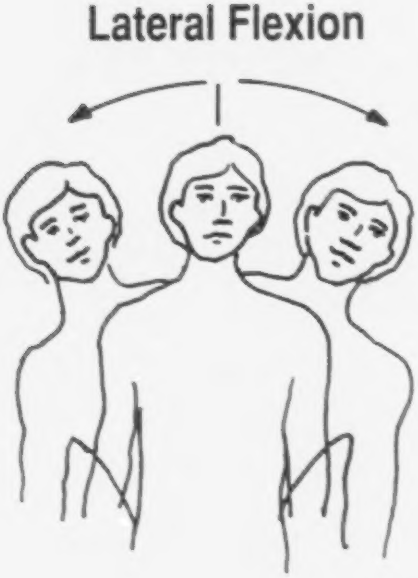

Lateral Flexion

Normal Range of Motion

Thoracic and Lumbar

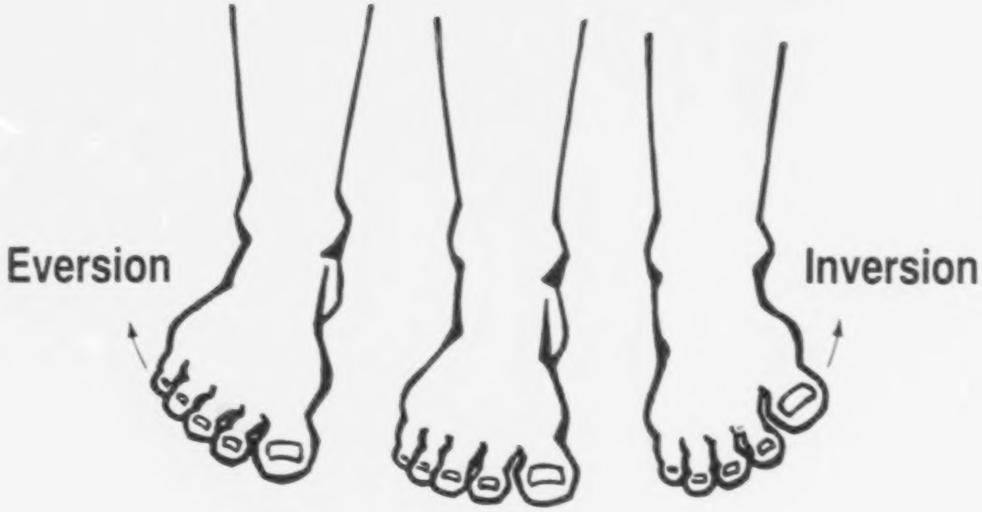

Extension
Flexion

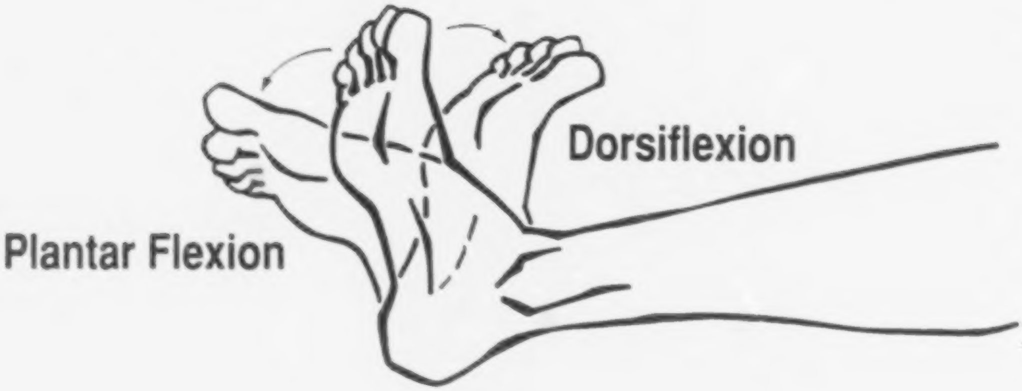



Lateral Flexion

Normal Range of Motion Specific Terms

Lower Extremities


Eversion
Inversion


Dorsiflexion
Plantar Flexion

ACTIVITY SHEET 1

PROVIDE FOR PATIENT MOVEMENT

VIII

Life Science Skills
- Investigate health issues (medical)

Cognitive Activity Skills
- Collect/record information
- Apply a problem-solving model
- Draw conclusions

Use the fall prevention assessment scale to rate each of the following patients.

FALL PREVENTION ASSESSMENT*

		Yes	No
1.	> 65 years old < 5 years old	☐	☐
2.	Altered mental status	☐	☐
3.	History of falls	☐	☐
4.	Recent LOC, seizure, dizziness	☐	☐
5.	Altered mobility	☐	☐
6.	Impaired vision/hearing	☐	☐
7.	Incontinent	☐	☐
8.	Receiving hypnotics, sedatives, diuretics, laxatives	☐	☐

Total yes ______

Two or more "yes" meets criteria for fall precautions.

Mrs. Andrew is an 82-year-old female who has just been admitted to the nursing unit from the emergency room. She is alert and oriented to her surroundings now but earlier this evening her family found her unresponsive at her home. She was transported to the emergency room by ambulance where she regained consciousness. At home she ambulates with a walker after suffering a broken hip the previous year. The doctor's admission diagnosis is possible transient ischemic attack. He plans to do diagnostic studies including an electroencephalogram.

Rating ______ Fall Precautions Yes No

---

*Fall Prevention Assessment used with permission of Midewest City Regional Hospital, Midwest City, OK.

Amy Fielding is a three-year-old who has been admitted to the hospital with pneumonia. At home her temperature reached 104° F. She had a seizure which her doctor feels was related to the high temperature. Her mother must leave to care for her two-month-old brother who is being breast fed. Amy cries uncontrollably when she is left.

Rating ______ Fall Precautions Yes No

Mr. Ortega is a 35-year-old male who suffers from multiple sclerosis. He is admitted from time to time with various symptoms. His attack this time includes extreme muscle weakness and blurred vision in the left eye. He also is experiencing urinary frequency, causing him to urinate frequently. He will be treated with steroids.

Rating ______ Fall Precautions Yes No

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for: SCIENCE SKILLS
CREATIVE THINKING/PROBLEM SOLVING SKILLS

- Introduce the assignment to the students by discussing why science and creative thinking and problem-solving skills are important.

- Discuss with them the following skills which are relevant to this task.

  SCIENCE SKILLS

  — Investigating health issues

  CREATIVE THINKING AND PROBLEM-SOLVING

  — Collecting/recording information

  — Applying problem-solving model

  — Drawing conclusions

- If students have difficulty investigating health issues, discuss the conditions that might require fall precautions.

- If students have difficulty collecting/recording information:

  — Stress the importance of adequate information in solving problems.

  — Suggest they read and observe carefully in order to obtain pertinent information.

- If students have difficulty applying a problem-solving model, discuss the components of the model.

- If students have difficulty drawing conclusions:

  — Review the information.

  — Review the problem-solving model.

ASSIGNMENT SHEET 1

PROVIDE FOR PATIENT MOVEMENT

VIII

NAME ______________________________ SCORE ________

OBJECTIVE 15 **Assess mobility.**

INTRODUCTION Assessment of mobility begins the moment the nurse sees the patient. It continues with physical observation and interviewing.

DIRECTIONS Choose a patient and complete the following assessment of mobility. The questions indicate some of the considerations necessary. Note any other characteristics observed. Make a statement about each category.

Language Skills
- State ideas clearly

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Conduct/receive interviews
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

Method of transport
(Is the patient transported by wheelchair or carrier? Does the patient walk, and if so, is it with or without assistance?)

Posture
(Does the patient stand erect or is he stooped? Is there any curvature of the spinal column evident? If patient is confined to bed, is body aligned correctly?)

Gait
(Is it even and regular? Does the patient limp, and if so, with which leg? Does the patient sway or stagger? Does he appear to lean forward when walking?)

General Relating Skills

- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Cognitive Activity Skills

- Collect/record information

Job Acquisition/Development Skills

- Master specific job task/procedure
- Deal effectively with customers/clients

Movement of limbs
(Does the patient move all limbs? Are the movements equal in right and left legs and arms? Is complete range of motion exhibited in all joints?)

____

____

____

Symmetry of limbs
(Are both legs and both arms equal in size, shape, and position?)

____

____

____

Circulatory status of limbs
(Is there a change in color or temperature? Is there any edema? Is capillary refill rapid? Is a pulse present?)

____

____

Neurological status of limbs
(Does the patient move the indicated limb on command? Can he identify the part being touched? Does he complain of numbness, pain, or other sensations? Can he grasp equally with the fingers of both hands? Can he push against your hands, with both feet equally?)

____

____

Assessment of joints
(Is there an increase in size or knotted appearance of any joints? Is there redness around any joint? Do any joints feel warm to the touch? Does he complain of pain with movement of any joint?)

____

____

Ambulatory aids
(Are canes, walkers, crutches, or wheelchairs used?)

____

____

Prosthetic devices
(Does the patient have any artificial limbs?)

____

____

Activities of daily living
(Is the patient able to care for himself? What are his exercise habits? Does he tire easily with exercise? Is any change in the environment necessary to complete activities of daily living?)

____

____

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

Skill development for:
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
CREATIVE THINKING AND PROBLEM SOLVING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing, science, oral communication, interpersonal or relating, creative thinking and problem-solving, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

WRITING SKILLS

- Stating ideas clearly
- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Conducting/receiving interviews
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

CREATIVE THINKING AND PROBLEM SOLVING SKILLS

- Collecting/recording information

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Dealing effectively with clients/customers/patients

- If students have difficulty stating ideas clearly:
  - Instruct them to organize their thoughts before they begin writing.
  - Suggest they use simple, concise language.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, review the appropriate units of *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues, discuss patient mobility.
- If students have difficulty applying active listening skills:
  - Encourage them to familiarize themselves with the patient's history before beginning the procedure.
  - Have them practice listening and then repeating the information.

EXAMPLE: Patient: "My left hand is numb."
Student: "I will note that your left hand is numb."

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  - Suggest that they be ready to listen before beginning the communication.
  - Stress the importance of focusing on the speaker.
  - Remind them that maintaining eye contact enhances listening ability.

- If students have difficulty giving/following oral directions:
  - Instruct them to organize their thoughts before directions are begun.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty applying questioning techniques:
  - Instruct them to have their questions ready before beginning the communication.
  - Stress the importance of accurate questioning to identify subjective symptoms.

- If students have difficulty conducting/receiving interviews:
  - Discuss the importance of obtaining information from the patient.
  - Stress the fact that talking to the patient can help the patient feel more relaxed and confident.

- If students have difficulty analyzing/applying non-verbal communication:

  Discuss some ways in which patients reveal information non-verbally.

  EXAMPLE:
  Facial expressions
  Body position
  Tone of voice
  Movements
  Mannerisms

- Discuss some ways in which students can convey information non-verbally.

  EXAMPLE: The students can convey concern for the comfort and self-esteem of the patient by providing privacy.

- If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, conducting/receiving interviews, and analyzing/applying non-verbal communication skills.

- If students have difficulty collecting/recording information, remind them to read, listen, and observe carefully to obtain information.

- If students have difficulty mastering specific job task/procedure:

  - Suggest they study each component of a procedure to determine which area is causing difficulty.

  - Review the entire procedure.

  - Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.

  - Team them with proficient students or professionals to practice the procedure.

PROVIDE FOR PATIENT MOVEMENT

ASSIGNMENT SHEET 1

- Check that student has assessed patient completely and accurately.
- Check for proper use of abbreviations where appropriate.

JOB SHEET 1
PROVIDE FOR PATIENT MOVEMENT

OBJECTIVE 16a

Perform passive range of mo

INTRODUCTION

When the patient is not able to
must do it for him. This is calle

The doctor may write a specific
but the nurse should exercise j
patients. It is an expected par

The exercise may be accomplis
Bath time is an especially good
motion exercises. Many of the
reach all surfaces of the body.
during the bath helps with relax
easily moved.

When passive range of motion
both the nurse and the patient
important considerations in pat
movements of each joint.

EQUIPMENT AND SUPPLIES

- Bath blanket

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)
- Use content area vocabulary

Assessment and Analysis

1. Check for any medical or
contraindicate or alter pro

   EXAMPLES: Cardiac pr

2. Assess physical condition
3. Assess movement possib
4. Assess patient's understa
motion exercises.

Planning

5. Determine number of time

   NOTE: Three to five time

range of motion exercises.

is not able to exercise his own joints, the nurse
. This is called passive range of motion.

vrite a specific order for range of motion exercises,
uld exercise joints on a regular basis for all
expected part of nursing practice.

be accomplished in part as other care is given.
specially good time to carry out passive range of
Many of the joint movements are necessary to
of the body. The warm water applied to the body
elps with relaxation and body parts can be more

nge of motion exercises are performed correctly,
d the patient will be protected. One of the most
rations in patient safety is knowing the normal
ch joint.

Analysis

y medical or nursing diagnoses which would
e or alter procedure.

Cardiac problems, activity intolerance

ical condition of joints.

ement possible in joints.

ent's understanding of importance of range of
cises.

umber of times each joint will be exercised.

ee to five times is usually considered adequate.

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with customers/clients

6. Plan to
   a. Support joints during movement.
   b. Move joints slowly and gently.
   c. **Move joints to point of slight resistance, but do not force joint.**
   d. Follow a pattern to include all possible movements for each joint.

      NOTE: A head-to-toe order is usually used.
   e. Observe patient closely for signs of pain.
   f. Return all joints to neutral position at completion of each exercise.
7. Wash hands.
8. Explain procedure to patient.
9. Raise bed to comfortable working height.
10. Position patient in supine position.
11. Move patient close to side of bed where you will be standing.

    NOTE: Stand on affected side.
12. Remove top covers and cover patient with bath blanket.

Implementation

13. Exercise the neck.

    NOTE: Exercise of the neck may be restricted to the physical therapist depending on agency policy.
    a. Flex and extend the neck by

       NOTE: The pillow should be removed for this exercise.
       1) Placing one hand under the chin and one hand under the head.

2) Moving the chin forward to touch the chest and back to touch the bed.

b. Rotate the neck by

1) Placing the hands alongside each cheek.

2) Moving the head to the left and right.

14. Exercise the shoulder.

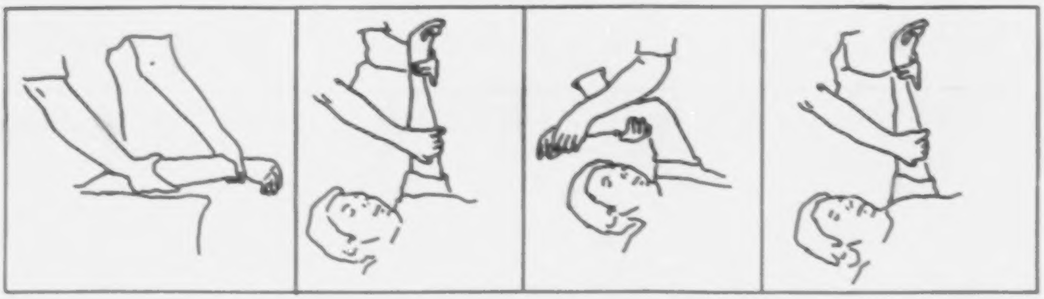
a. Flex and extend the shoulder by

1) Placing one hand under elbow and one hand under wrist.

2) Moving arm up toward ceiling and back toward head.

NOTE: Elbow may be bent to prevent hitting headboard of bed.

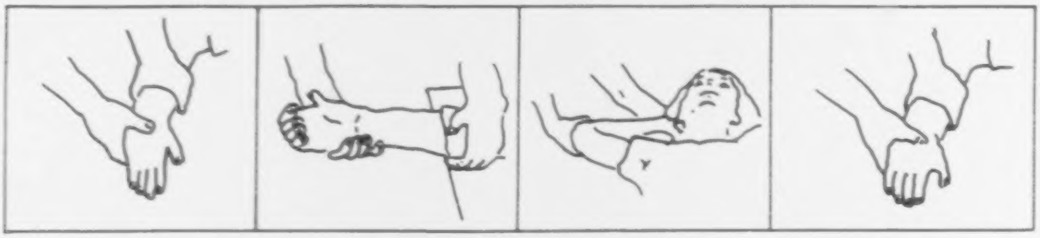
3) Returning to side.



b. Abduct and adduct shoulder by

1) Placing one hand under elbow and one hand under wrist.

2) Moving arm out away from body and back across body.



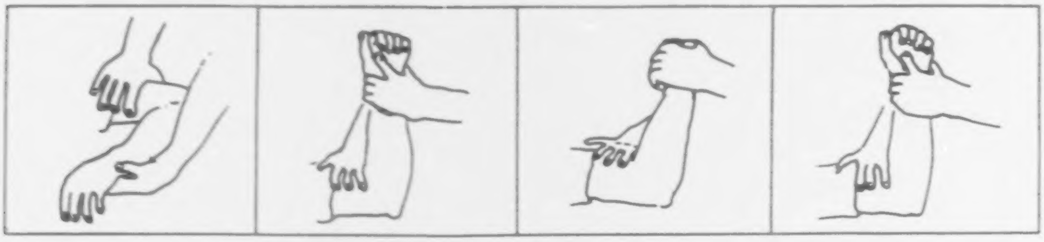
c. Rotate the shoulder internally and externally by

1) Placing the arm out to the side at shoulder, level with the elbow flexed.

2) Placing one hand on the wrist and one hand on the upper arm.

3) Moving the wrist forward to touch the bed and backward to touch the bed.

4) Returning arm to side.

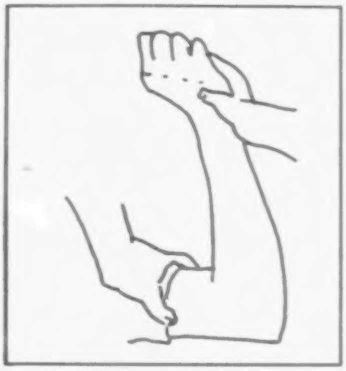


15. Exercise the elbow and lower arm.

a. Flex and extend the elbow by

1) Placing one hand on the wrist and one hand on the upper arm.

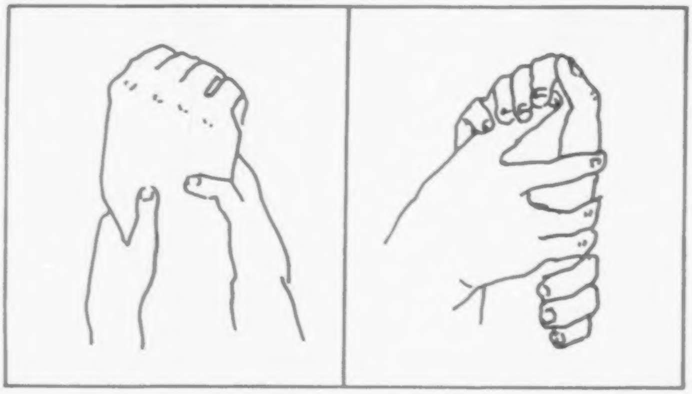
2) Moving the wrist toward the shoulder and back.



b. Pronate and supinate the lower arm by

   1) Placing one hand in the patient's hand and the other hand on the lower arm.

   2) Turning palm down and palm up.



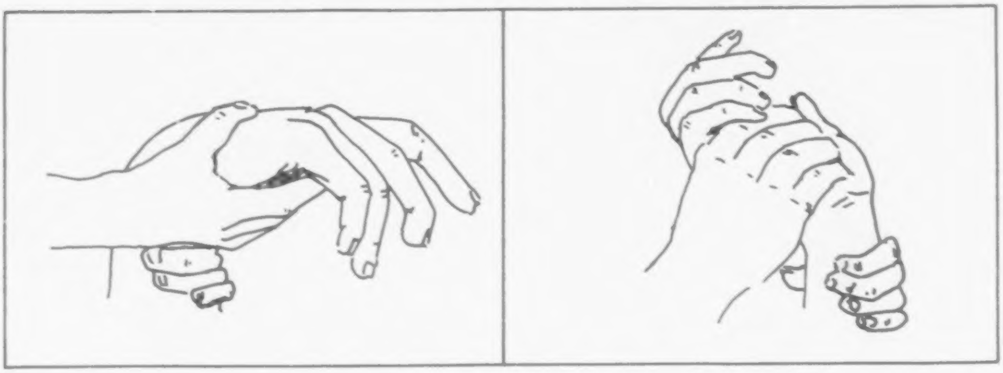
16. Exercise the wrist.

   a. Flex and extend the wrist by

      1) Flexing elbow so that upper arm is resting on bed and lower arm extends upward.

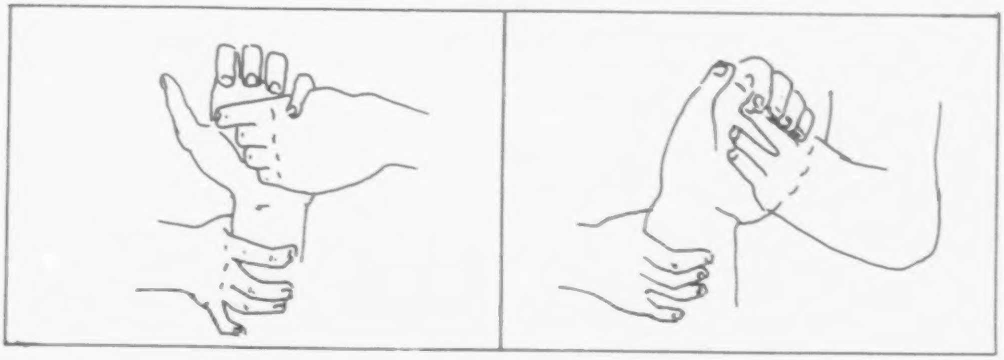
2) Placing one hand on forearm and other on hand.

3) Moving palm down (palmar flexion), straight out (extension) and back toward the shoulder (dorsal flexion).



b. Abduct and adduct (deviation of) the wrist by

1) Moving the hand toward the thumb and back toward the little finger.

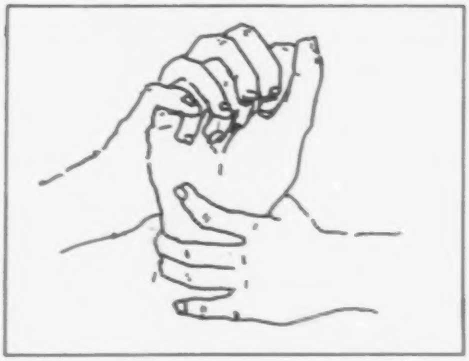


17. Exercise the fingers.

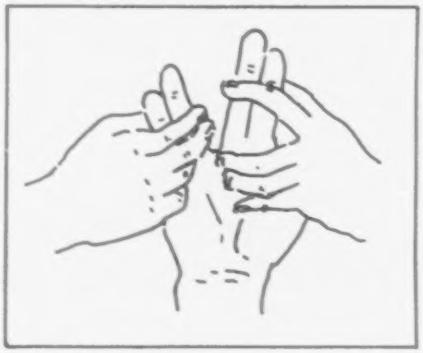
a. Flex and extend the fingers by

1) Placing one hand on the wrist and one hand over the fingers.

2) Bending the fingers into a fist and straightening them.



b. Abduct and adduct the fingers by moving each finger toward and away from the adjacent finger.



c. Move the fingers in opposition to the thumb by touching the thumb to each finger.

18. Exercise the hip and knee.

CAUTION!

HIP INJURY POSSIBLE. Exercises may be contraindicated for hip surgery patients. Check patient's history and doctor's orders.

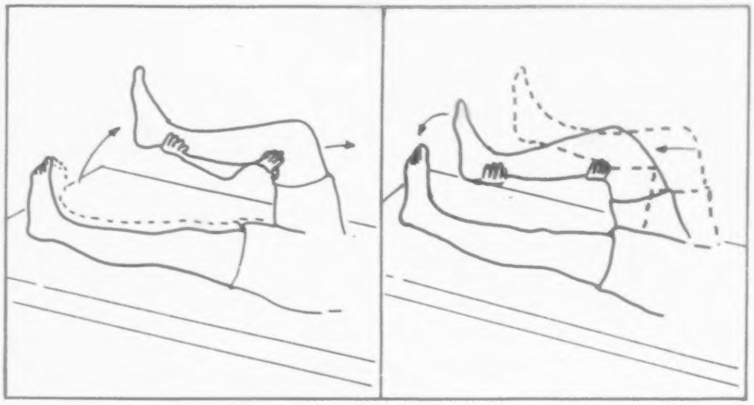
---

a. Flex and extend the hip and knee by

1) Placing one hand under the knee and one hand under the ankle.

2) Lifting the leg, flexing the knee and moving the leg back as far as possible toward the chest.

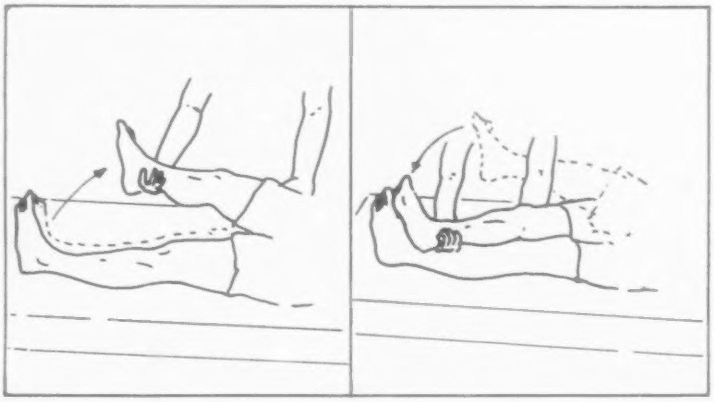
3) Straightening and returning the leg to the bed.



b. Abduct and adduct the hip by

1) Placing the hands under the knee and ankle.

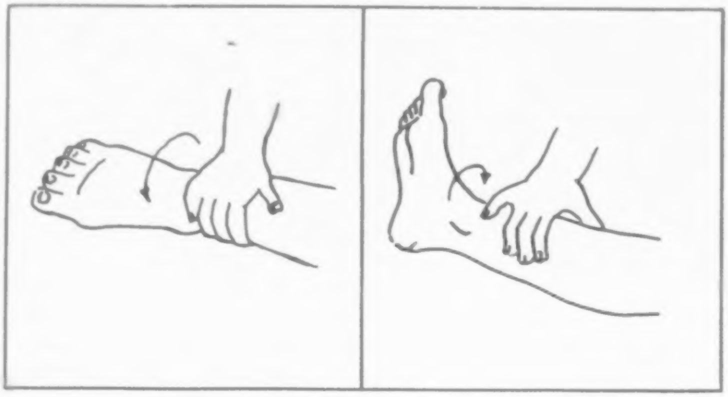
2) Moving the leg out to the side and back across the other leg.



c. Internally and externally rotate the hip by

1) Placing one hand over the knee and the other hand over the ankle.

2) Turning the leg outward and inward.



19. Exercise the ankle and foot.

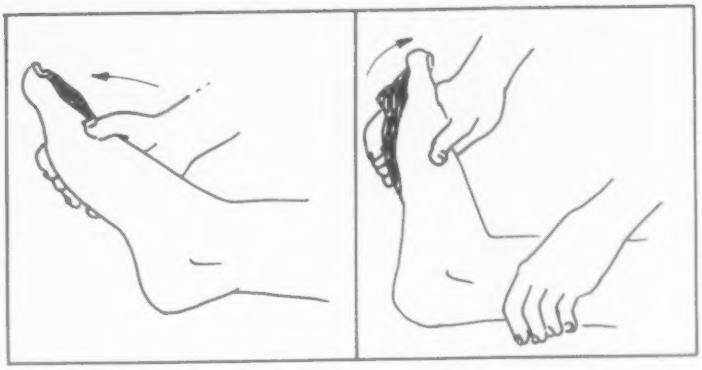
a. Flex and extend the ankle by

1) Placing one hand under heel with forearm against sole of foot and other hand under knee.

2) Pushing the foot backward in dorsal flexion.

3) Placing one hand over the ankle and the other hand over the foot.

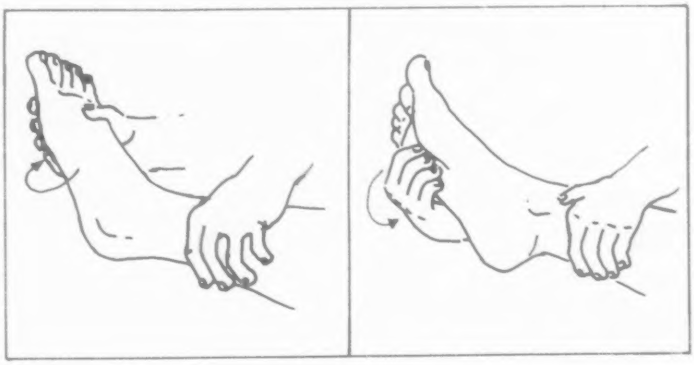
4) Pushing the foot downward in plantar flexion.



b. Perform inversion and eversion of the foot by

  1) Placing one hand under the ankle and the other over the foot.

  2) Turning the foot inward and outward.

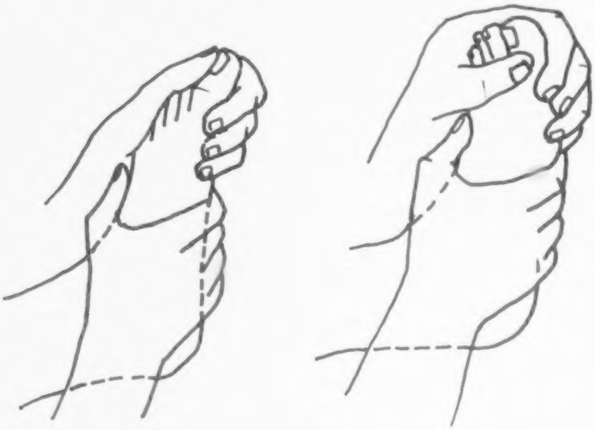


20. Exercise the toes.

  a. Flex and extend the toes by

    1) Placing one hand over the ankle and the other hand over the toes.

2) Curling the toes downward and straightening.



b. Abduct and adduct the toes by

   1) Placing fingers alternately on two adjoining toes.

   2) Separating and returning toes.

21. Replace top covers.

22. Place patient in comfortable position.

23. Return bed to lowest level.

24. Wash hands.

Evaluate

25. Evaluate using the following criteria

   a. Joints move easily through complete range of motion.

   b. Patient experiences no additional pain on movement.

Document

26. Record and report

   a. Joints exercised.

   b. Ease of movement or resistance of joints.

c. Any unusual appearance of joints such as swelling, redness, or nodules.

d. Any complaints of patient such as pain or fatigue.

PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for:	READING SKILLS WRITING SKILLS SCIENCE SKILLS ORAL COMMUNICATION SKILLS INTERPERSONAL/RELATING SKILLS EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

— Using content area vocabulary

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty interpreting graphics and symbols:
  - Have them examine the graphic or symbol to determine which elements are represented.
  - Instruct them to relate the graphics or symbols to the information in the text.
- If students have difficulty using content area vocabulary, stress the importance of learning medical terminology.
- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety procedures.
  - Review the safety procedures relevant to the specific job task.

- If students have difficulty practicing good work habits/attitudes:
    - Encourage the students to become familiar with the entire procedure before they begin the work.
    - Discuss the role that good work habits and attitudes have in obtaining and retaining employment.
    - Discuss what behaviors and attitudes constitute good work habits.
    - Make sure the student knows what is expected of him or her.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Assignment Sheet 1.

OBJECTIVE 16b **Instruct patient in active range of motion exercises.**

INTRODUCTION The patient should be encouraged to use all joints in active movement to preserve function. The nurse should instruct the patient in activities to complete all possible movements.

Encouraging as much activity as possible will aid in exercising a number of joints.

Incorporating Active Range of Joint Motion Exercises into Activities of Daily Living*

Joint Exercised	Activity of Daily Living	Movement
Neck	Nodding head yes	Flexion
	Shaking head no	Rotation
	Moving right ear to right shoulder	Lateral flexion
	Moving left ear to left shoulder	Lateral flexion
Shoulder	Reaching to turn on overhead light	Extension
	Reaching to bedside stand for book	Extension
	Scratching back	Hyperextension
	Rotating shoulders toward chest	Abduction
	Rotating shoulders toward back	Adduction
Elbow	Eating, bathing, shaving, grooming	Flexion, extension,
Wrist	Eating, bathing, shaving, grooming	Flexion, extension, hyperextension, abduction, adduction
Fingers/thumb	All activities requiring fine motor coordination, e.g., writing, eating, hobbies	Flexion, extension, abduction, adduction, opposition
Hip	Walking	Flexion, extension, hyperextension
	Moving to side-lying position	Flexion, extension, abduction
	Moving from side-lying position	Extension, adduction
	Rolling feet inward	Internal rotation
	Rolling feet outward	External rotation
Knee	Walking	Flexion, extension
	Moving to and from a side-lying position	Flexion, extension
Ankle	Walking	Dorsiflexion, plantar flexion
	Moving toe toward head of bed	Dorsiflexion
	Moving toe toward foot of bed	Plantar flexion
Toes	Walking	Extension, hyperextension
	Wiggling toes	Abduction, adduction

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*Used with permission from Perry/Potter, *Clinical Nursing Skills and Techniques*, ©1986, St. Louis, The C.V. Mosby Company.

EQUIPMENT AND SUPPLIES

None required

NOTE: Many objects used in the activities of daily living will aid in completing range of motion exercises. Items like a soft rubber ball or clay can be used to encourage some movements.

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Use content area vocabulary

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

Assessment and Analysis

1. Check for any medical or nursing diagnoses which would contraindicate or alter procedure.

   EXAMPLES: Past joint replacement, cardiac problems, activity intolerance

2. Assess physical condition of joints.

3. Assess movement possible in joints.

4. Assess patient's understanding of importance of range of motion exercises.

Planning

5. Explain procedure to patient, including the benefits of active movement. Caution patient not to push beyond resistance.

6. Have the patient wear clothing to permit active movement.

7. Provide a safe place for exercising.

   NOTE: Some exercises can be done in sitting or standing position, while others require that the patient lie down.

Implementation

8. Instruct the patient to exercise the neck by

   a. Bending the neck forward until the chin touches the chest and return to starting position (flexion and extension).

   b. Turn the head to left and right (rotation).

General Relating Skills

- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with clients/customers/patients

9. Instruct the patient to exercise the shoulder by

   a. Lifting the arm forward, over the head and returning it to the side (flexion and extension).

   b. Lifting the arm up and out to the side and returning it to the side (abduction and adduction).

   c. Flexing the elbow and bringing the elbow to shoulder level, then touching the back of neck with the fingers (external rotation).

   d. Flexing the elbow and reaching across chest to touch opposite shoulder (internal rotation).

10. Instruct the patient to exercise the elbow and forearm by

    a. Bending the elbow to touch the shoulder with fingers and straightening (flexion and extension).

    b. Extending the arm and turning the palm upward and downward (pronation and supination).

11. Instruct the patient to exercise the wrist by

    a. Bending palm side of hand down toward arm and back pulling fingers toward shoulder (palmar flexion and dorsal flexion)

    b. Move hand from side to side toward thumb and then toward little finger (deviation).

12. Instruct the patient to exercise fingers by

    a. Making a fist and straightening the fingers (flexion and extension).

    b. Spreading fingers like a fan and bringing fingers back together (abduction and adduction).

    c. Touching thumb to each finger (opposition).

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13. Instruct patient to exercise hip and knee by lying in supine position and

    a. Bending the knee and bringing it as close to the chest as possible, then returning it to starting position (flexion and extension).

    b. Moving the leg out to the side and returning it (abduction and adduction).

    c. Turning legs inward so toes of two legs touch and then turning outward (internal and external rotation).

⚠

CAUTION!

EXERCISES MAY BE CONTRAINDICATED after hip prosthesis insertion. Check patient's history before performing exercises.

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14. Instruct patient to exercise ankle and foot by

    a. Bending foot upward toward leg and downward away from leg (dorsal flexion and plantar flexion).

    b. Roll foot toward big toe side and back toward little toe side (inversion and eversion).

15. Instruct patient to exercise toes by

    a. Curling toes and straightening.

Evaluation

16. Evaluate using the following criteria

    a. Patient can perform each exercise with fullest possible range of motion.

    b. Patient does not experience increased pain with movements.

Documentation

17. Record and report
    a. Ability of patient to complete active range of motion exercises.
    b. Any complaints of pain or fatigue.
    c. All instructions given to patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Using content area vocabulary

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

— Analyzing/applying non-verbal communication

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1.

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JOB SHEET 3 — PROVIDE FOR PATIENT MOVEMENT — VIII

OBJECTIVE 16c

Apply anti-embolism stockings.

INTRODUCTION

Anti-embolism stockings help preserve circulatory function in the immobile patient. Their use can prevent several types of complications, but if they are not applied correctly, they can do more harm than good. Proper application begins with measuring carefully, to determine the correct size.

EQUIPMENT AND SUPPLIES

- Tape measure
- Anti-embolism stockings (either knee or thigh length as ordered)
- Powder (Optional)

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)
- Use content area vocabulary

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Check for medical or nursing diagnoses which would contraindicate anti-embolism stockings.

   EXAMPLES: Dermatitis, pulmonary edema

2. Inspect the legs for signs of skin lesions.

   NOTE: These would probably mean that the stockings could not be worn.

Planning

3. Identify patient.
4. Explain procedure, making sure patient understands need for stockings.
5. Determine what length stockings are needed.

   a. Have patient lie down.

   For knee-length stockings

   b. Measure from bottom of heel to back of knee.

   c. Measure circumference of calf at widest point.

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General Science Skills
- Use scientific instruments (tape)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with customers/clients

For thigh-length stockings

b. Measure from bottom of heel to the gluteal fold.

c. Measure circumference of calf at widest point.

d. Measure circumference of thigh at widest point.

6. Obtain correct size stockings.

7. Have patient lie down with legs elevated for at least 15 minutes before applying stockings.

8. Raise bed to comfortable working height.

Implementation

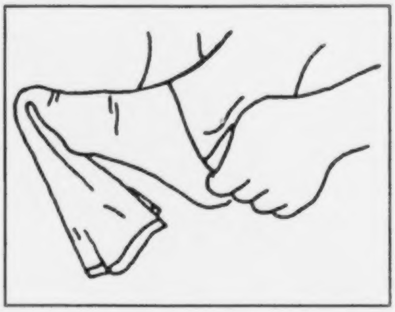
NOTE: Read manufacturer's instructions for correct application.

9. Put a small amount of powder on patient's legs.

10. Grasping heel of stocking, turn entire stocking inside out.

11. Place patient's foot into foot of stocking and pull stocking over foot.

    NOTE: Be sure heel fits into stocking heel. There may be excess material at toes, but the stockings should not be tight at toes.



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*Used with permission of the Kendall Company from *In-Service Guide for the Use of T.E.D. Anti-Embolism Stockings*, Boston, Massachusetts.

12. Pull stocking up over rest of leg to correct length, making sure it fits smoothly without wrinkles or creases.

    NOTE: Stocking should not be turned down at top since this could constrict circulation. If measured correctly, the stockings should reach the correct length without excess or shortage.

13. Check toes for adequate circulation (color, skin temperature, presence of edema, capillary refill, and pedal pulse).

14. Remove stockings once every eight hours and re-evaluate condition of skin and circulatory status.

15. Change stockings if they are soiled.

Evaluation

16. Evaluate according to following criteria

    a. Stockings fit to appropriate length without wrinkles or folds.

    b. Circulation remains adequate.

    c. Skin does not develop signs of allergic reaction, such as redness.

Documentation

17. Document

    a. Application of anti-embolism stockings.

    b. Circulatory status.

    c. Condition of skin before application and when removed.

PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABIITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions
- Interpreting grahics and symbols
- Using content area vocabulary

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Making measurements

SCIENCE SKILLS

- Using scientific instrument (tape)
- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL CUMMUNICATION SKILLS

— Communicating with clients/customers/patients

INTERPERSONAL OR RELATING SKILLS

— Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

— Mastering specific job task/procedure

— Applying safety practices/procedures

— Practicing good work habits/attitudes

— Dealing effectively with clients/customers/patients

- If students have difficulty using English and metric measures or making measurements, review units of measure in the English and metric system.

- If students have difficulty using English and metric measures or making measurements, determine which measurement system is used on available instrument and demonstrate its use.

- If students have difficulty using scientific instruments (tape), demonstrate the correct procedure for using the instrument.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1.

JOB SHEET 4

PROVIDE FOR PATIENT MOVEMENT

VIII

OBJECTIVE 16d

Position the patient in the supine, prone, lateral, Fowler's and Sim's positions.

INTRODUCTION

Turning and positioning the patient is an extremely important nursing measure. The safety of both the nurse and the patient should be considered. The patient's comfort and prevention of complications should also guide the nurse's actions.

If the patient cannot change positions for himself, the nurse should do so at least every two hours. A variety of positions will help prevent complications and provide stimulation.

EQUIPMENT AND SUPPLIES

Equipment which will help in assuming and maintaining position should be chosen for each patient on an individual basis. This could include:

- Trapeze
- Siderails
- Pillows
- Turning sheet
- Bath blankets, towels, and other linens as needed for positioning
- Footboard
- Hand rolls
- Trochanter rolls
- Sand bags

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)
- Use content area vocabulary

Assessment and Analysis

1. Check for any medical or nursing diagnoses which would limit positions patient could assume.
2. Determine how much assistance patient will need.
3. Check for presence of equipment.

   EXAMPLES: Catheters, IV lines, traction equipment, etc.

Planning

4. Obtain sufficient help.
5. Assemble any equipment needed.

6. Wash hands.

7. Explain procedure to patient, making sure he understands need for frequent repositioning.

8. Elevate bed to comfortable working height.

Implementation

9. Place patient in supine position.

   a. Place patient on back with head of bed flat.

   b. Place pillow under head, neck, and upper shoulders, taking care to prevent flexion of neck.

   c. Place small pillow or pad under lumbar area.

   d. Place small pad under knees
      or
      elevate knee gatch slightly
      or
      place pillow under lower legs to permit slight flexion of knees and to prevent pressure on heels.

CAUTION!
POOLING OF BLOOD AND CONTRACTURE FORMATION POSSIBLE. Do not permit pressure against back of knee or marked flexion of knee.

---

   e. Position footboard against soles of feet.

   f. Place trochanter rolls or sandbags at lateral aspects of thighs.

   g. Place pillows under arms.

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

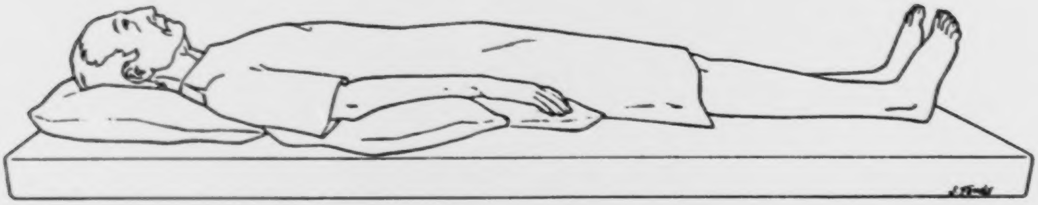
Interactive Communication Skills
- Communicate with clients/customers/patients
- Communicate with co-workers

General Relating Skills
- Interact with co-workers
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure

- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with customers/clients

h. Place hand rolls in hands.



10. Place patient in prone position.

    a. Begin with patient in supine position and bed flat.

    b. Remove all pillows and pads.

    c. Move patient to side of bed.

        1) If condition allows, place hands and forearms under head/shoulders and lumbar area and pull toward edge of bed.

        2) Reposition hands and forearms under lumbar area and thighs and pull toward edge of bed.

        3) Reposition hands and forearms under thighs and calves and pull toward edge of bed.

⚠

CAUTION!

BACK INJURY POSSIBLE. Using technique can injure back if performed incorrectly or if back is weak. Use turning sheet to bring patient to edge of bed.

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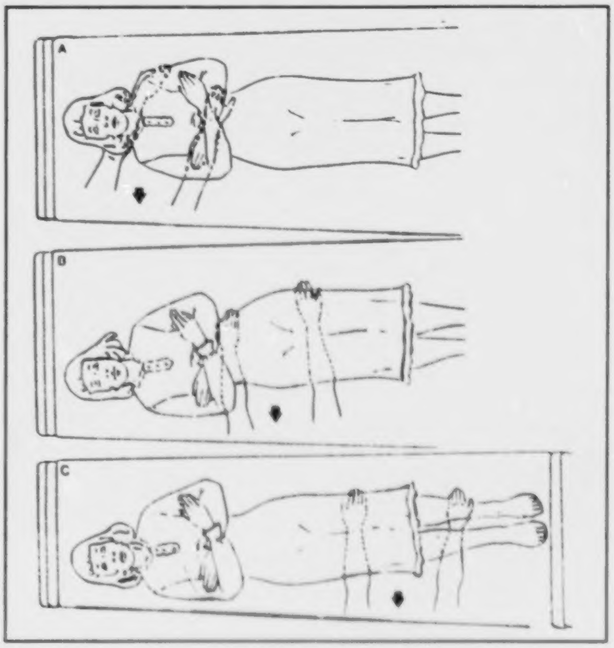

d. Place farthest arm alongside patient, cross near arm over chest, and cross near leg at ankle.

e. Raise siderail and move to opposite side of bed.

f. Lower siderail and position hands on patient's shoulders and hips.

g. Pull patient to side.

h. Place small pad or pillow on bed next to abdomen and small pillow next to ankles.

i. Pull patient to abdomen.

j. Turn head to one side and place on pillow.

k. Place hand rolls as necessary.

NOTE: Patient could be positioned with toes over edge of mattress.

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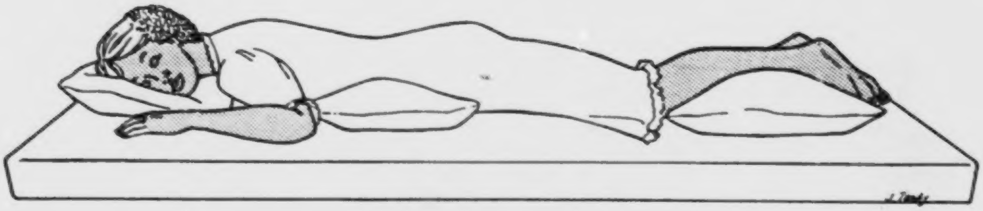

11. Position patient in lateral position.

    a. Follow steps outlined above to move patient to edge of bed.

    b. Place far arm alongside head, cross near arm over the chest, and cross near leg at the ankle.

    c. Follow steps outlined above for moving patient to side.

    d. Place pillow(s) behind patient to maintain position, if needed.

    e. Position pillow under head.

    f. Place upper arm on pillow.

    g. Flex upper leg for comfort leaving lower leg straight or flexing slightly.

    h. Place pillow or pad between legs.

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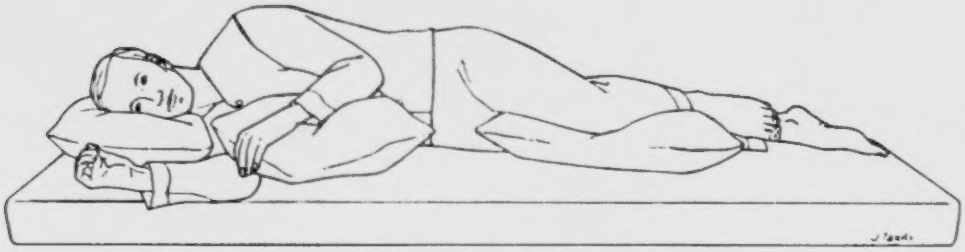
i. Place hand rolls as needed.



12. Place patient in Fowler's position.
    a. Begin with patient in supine position with bed flat
    b. Pull patient to head of bed using following technique.

       NOTE: Having patient at head of bed will assist in maintaining normal curves of body in Fowler's position.

       1) Remove pillow from under head and place on side against headboard.
       2) Extend arm nearest headboard under patient's head/shoulders, grasping far axilla.
       3) Place other hand in near axilla.
       4) Instruct patient to flex knees.
       5) At prearranged signal, nurse should pull patient up in bed while patient pushes against bed with feet.

          NOTE: If patient cannot assist, two nurses, one on either side of bed can reposition patient or a turning sheet can be used.

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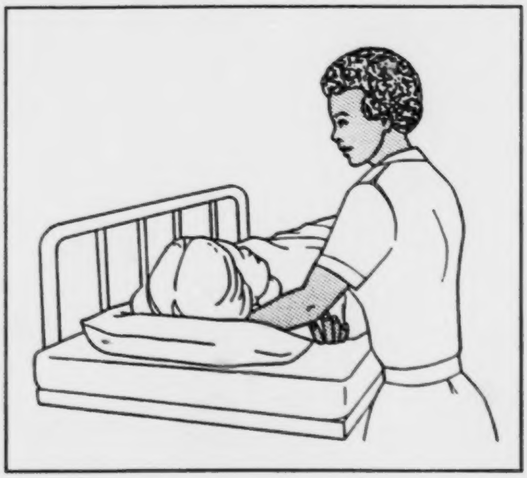

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c. Raise head of bed to Fowler's position (15-90 degrees, depending on reason for position).

d. Raise knee gatch slightly or place small pillow under knees to prevent patient from sliding downward.

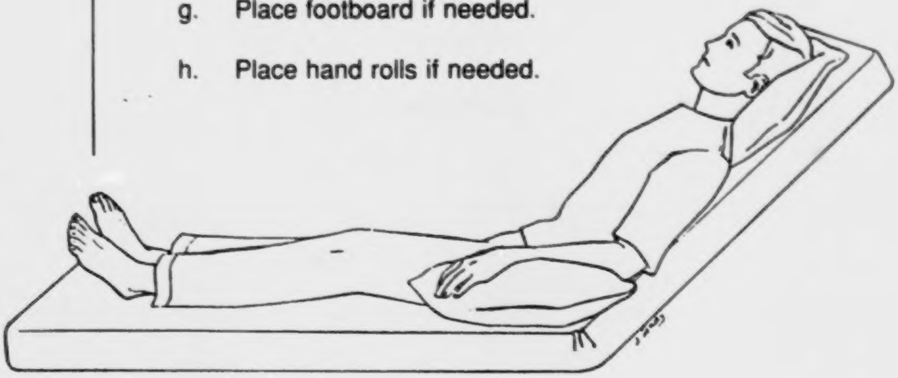
NOTE: Some beds raise the knee gatch automatically when the head of the bed is raised.

e. Place pillow under head.

f. Place pillows under arms.

g. Place footboard if needed.

h. Place hand rolls if needed.



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13. Place patient in Sim's position.

    a. Begin with patient in supine position and bed flat.

    b. Follow instructions outlined above for moving patient to edge of bed.

    c. Turn patient to side as for prone position.

    d. Place pillow under head.

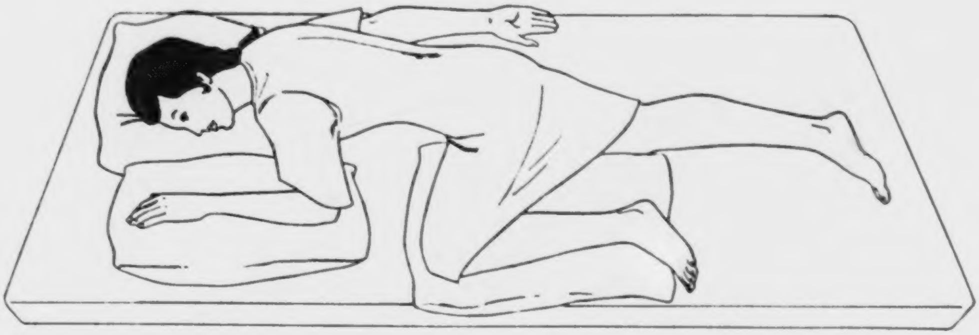
    e. Pull lower arm back behind patient.

    f. Flex upper arm and rest on pillow.

    g. Flex lower leg slightly and upper leg sharply.

    h. Place upper leg on pillow.

    i. Position hand rolls if needed.



14. Place call light in reach.

15. Lower bed to level nearest floor and raise siderails as indicated.

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Evaluation

16. Evaluate according to following criteria:
    a. The spine is straight.
    b. All joints are supported in a position of function.
    c. There is no pressure over bony prominences.
    d. Patient is comfortable.

Documentation

17. Record and report
    a. Position change, according to agency policy.
    b. Positioning aids used.
    c. Any complaints of patient.
    d. Any diminished range of motion in any joint.
    e. Any reddened or broken areas of the skin.
    f. Any increase or decrease in assistance required.

PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

— Using content area vocabulary

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Communicating with co-workers

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with co-workers
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with co-workers
- Dealing effectively with clients/customers/patients

- If students have difficulty communicating with, interacting with, or dealing effectively with co-workers:
  - Stress the importance of being able to work well with others.
  - Instruct them to examine their responsibilities during a specific procedure.
  - Review the communication and interpersonal or relating skills.

JOB SHEET 5 — PROVIDE FOR PATIENT MOVEMENT

VIII

OBJECTIVE 16e

Use a turning sheet.

INTRODUCTION

A turning sheet will make positioning easier for the nurse and the patient when the patient cannot assist in movement. It can be used to reposition the patient in bed as well as to transfer to a wheelchair or stretcher. The use of a turning sheet can minimize shearing force, which is a factor in decubitus ulcer formation.

EQUIPMENT, SUPPLIES, AND PERSONNEL

- Cotton drawsheet
- Assistant

NOTE: If a drawsheet is not available, a flat sheet may be folded for use.

PROCEDURE

Assessment and Analysis

1. Note any medical or nursing diagnoses which would make a turning sheet useful.
2. Assess patient's ability to assist in turning for placement.

Planning

3. Wash hands.
4. Obtain drawsheet.
5. Obtain assistance.
6. Explain procedure to patient.
7. Raise bed to comfortable working height.

Implementation

8. Assist patient to turn to side.
9. Unfold drawsheet and re-fold in half, lengthwise.
10. Place on bed with fold under patient's shoulders and loose edges even with edge of mattress.
11. Fanfold opposite edge close to patient.

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Communicate with clients/customers/patients

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- Communicate with co-workers

General Relating Skills

- Interact with co-workers
- Interact with clients/customers/patients

Job Acquisition/Development Skills

- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal with co-workers
- Deal effectively with clients/customers/patients

12. Assist patient to turn onto sheet.
13. Pull opposite side of sheet flat and smooth.
14. With assistant, roll turning sheet close to either side of patient.
15. On pre-arranged signal, lift turning sheet and patient and reposition or move as needed.
16. Make patient comfortable.
17. Provide with call light.
18. Lower bed to position nearest floor.

Evaluation

19. Evaluate according to following criteria.
    a. Turning sheet and all bottom linens are wrinkle-free.
    b. Patient is comfortable with joints supported in a position of function.

Documentation

20. Record and report
    a. Change of position or transfer.
    b. Positioning aids used.
    c. Any complaints of patient.
    d. Any diminished range of motion in any joint.
    e. Any reddened or broken areas of the skin.
    f. Any increase or decrease in assistance required.

PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral cummunication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Communicating with co-workers
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with co-workers
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

— Mastering specific job task/procedure

— Applying safety practices/procedures

— Practicing good work habits/attitudes

— Dealing effectively with co-workers

— Dealing effectively with customers/clients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheets 1 and 4.

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JOB SHEET 6

PROVIDE FOR PATIENT MOVEMENT

OBJECTIVE 16f

Logroll a patient.

INTRODUCTION

Patients who have any condition involving the spine must be moved carefully to keep the spine in perfect alignment. The technique used for such cases is called logrolling.

EQUIPMENT AND SUPPLIES

- Cotton drawsheet
- Pillows or blanket rolls

PROCEDURE

Assessment and Analysis

1. Note any medical or nursing diagnoses which would alter procedure.

   NOTE: The nurse could expect conditions such as spinal injuries or surgery involving the spinal column.

2. Determine amount of assistance required.

   NOTE: Two to three nurses will probably be needed depending on the size of the patient.

3. Determine whether draw sheet or turning sheet is in place.

Planning

4. Obtain sufficient help.
5. Wash hands.
6. Assemble pillows or blanket rolls
7. Explain procedure to patient.
8. Elevate bed to comfortable working height.
9. Instruct patient to cross arms across chest or place arms in that position.

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply non-verbal communication

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- Communicate with clients/customers/patients
- Communicate with co-workers

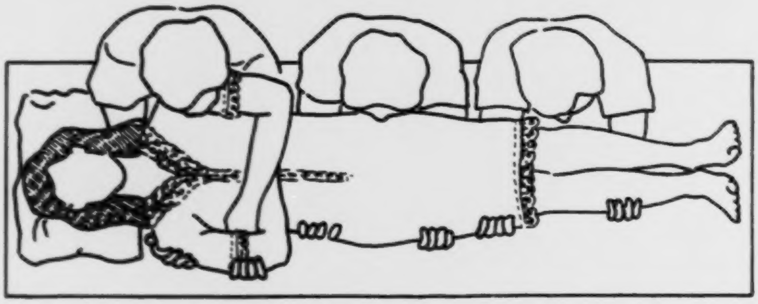
General Relating Skills
- Analyze/apply nonverbal communication
- Interact with co-workers
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with co-workers
- Deal effectively with clients/customers/patients

Implementation

10. Without turning sheet:

    a. Have all assistants stand on one side of bed and gently extend arms under patient to support entire body.



    b. On signal, patient should be pulled to edge of bed.

    c. Position a small pillow under patient's head to provide support when patient is turned to side and a second pillow between legs.

    d. Raise siderail.

    e. Assistants should then move to opposite side of bed and reach across patient to place hands on shoulders, hips and legs.

    f. On signal, pull patient smoothly to side.

11. With a turning sheet or drawsheet.

    a. With one or more assistants on each side of bed, roll turning sheet close to patient.

    b. On signal, all assistants use sheet to move patient close to edge of one side of bed.

    c. Position a small pillow under patient's head to provide support when patient is turned to side and a second pillow between legs.

   d. Raise siderail.

   e. Assistants should then move to opposite side of bed and reach across patient to grasp turning sheet close to patient.

   f. On signal, use turning sheet to pull patient smoothly to side.

12. Place pillows behind patient and under upper arm for support.

13. Place call light in reach.

14. Lower bed to level nearest floor and raise siderails.

15. Wash hands.

Evaluation

16. Evaluate according to following criteria:

   a. The spine is straight.

   b. Joints are supported in a position of function.

   c. There is no pressure over bony prominences.

   d. Patient is comfortable.

Documentation

17. Record and report:

   a. Position change according to agency policy.

   b. Any complaints of patient.

   c. Any reddened or broken areas of the skin.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABIITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Analyzing/applying non-verbal communication

— Communicating with client/customers/patients

— Communicating with co-workers

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with co-workers
- Interacting with clients/customers/patients

EMPLOYABIITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with co-workers
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheets 1 and 4.

JOB SHEET 7 — PROVIDE FOR PATIENT MOVEMENT — VIII

OBJECTIVE 16g — **Assist a patient to dangle.**

INTRODUCTION

To dangle a patient means to have the patient sit on the side of the bed with the feet extending toward the floor. It is often the first step toward regaining mobility. It precedes transfer to a chair or walking. The nurse may assist the patient or teach the patient to assume this position for himself.

EQUIPMENT AND SUPPLIES

- Slippers
- Robe
- Bath blanket

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Assess patient's ability to assist.
2. Note any medical or nursing diagnoses which would alter procedure.

Planning

3. Wash hands.
4. Assemble equipment.
5. Explain procedure to patient.
6. Check to make sure bed is in low position.
7. Check pulse.
8. Assist patient to move close to edge of bed.
9. Raise head of bed.
10. For patient needing assistance:
    a. Pull legs to edge of bed.
    b. Slide one arm around patient's shoulders and other arm under thighs, just above knees.
    c. Pull patient to sitting position with legs over edge of bed.

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Interactive Communication Skills

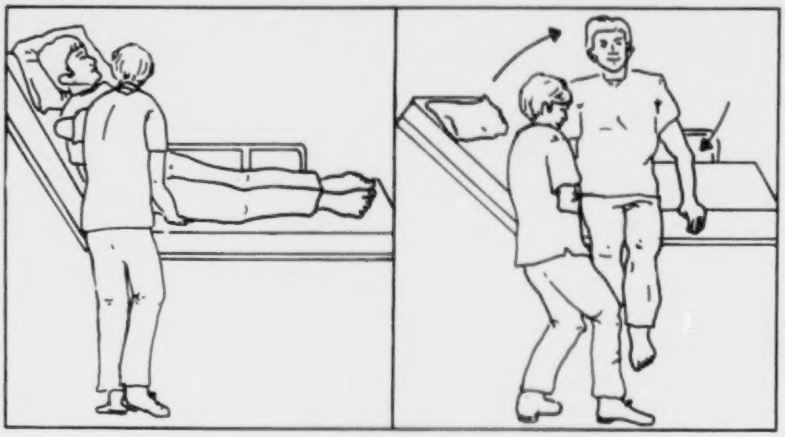
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills

- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills

- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with clients/customers/patients



NOTE: The nurse must use good body mechanics, being certain to maintain a broad base of support and straight back.

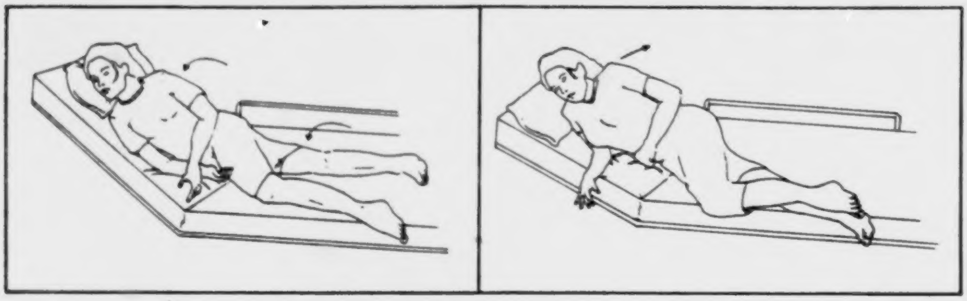
11. Instruct patient who is learning to assist self to:

    a. Turn to side.

    b. Place far or upper leg over edge of bed.

    c. Reach with far or upper arm for edge of mattress or siderail.

    d. Push up with arms and slide legs over side of bed.



12. Help stabilize patient.

13. Place slippers on feet and robe or blanket over shoulders.

14. Check pulse.

15. Observe patient closely for signs of weakness or fainting.

Evaluation

16. Evaluate using the following criteria

    a. Whether the patient experiences weakness or becomes faint.

    b. The patient is able to follow directions and assist.

    c. The patient is able to maintain the position for the desired amount of time.

    d. The patient does not experience inappropriate pain.

Documentation

17. Record and report

    a. The amount of time spent dangling.

    b. The patient's reaction.

    c. The amount of assistance required.

    d. Any complaints.

PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 7

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL CUMMUNICATION

— Giving/following oral directions

— Analyzing/applying non-verbal communication

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1.

JOB SHEET 8

PROVIDE FOR PATIENT MOVEMENT

VIII

OBJECTIVE 16h

Transfer a patient to a chair or wheel chair.

INTRODUCTION

A chair or wheelchair can be a therapeutic device. The activity involved in transfer will exercise joints and muscles. Circulation and all body processes are stimulated. Pressure is relieved. The patient is stimulated by a change in scenery, especially if a wheelchair is used and the patient is taken to a different area.

Once again, the safety of the nurse and patient is a prime consideration. The procedure requires proper planning and attention to body mechanics for the protection of all concerned.

EQUIPMENT, SUPPLIES, AND PERSONNEL

- Chair or wheelchair
- Bath blanket or other covering
- Pillows (Optional)
- Slippers
- Robe
- 1 or 2 assistants

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Assessment and Analysis

1. Determine patient's ability to help with procedure.

2. Note any medical or nursing diagnoses which would alter procedure.

3. Determine type of chair needed.

   NOTE: Patients who have had abdominal surgery will prefer a chair with a straight back. Orthopedic wheelchairs are available with reclining backs and removable arms. Leg pieces which will elevate are available.

Planning

4. Wash hands.

5. Obtain chair.

6. Place bath blanket or other covering in chair.

   NOTE: Many patients will appreciate pillows in the chair.

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- Investigate health issues (medical)

Interactive Communication Skills

- Give/follow oral directions
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients
- Communicate with co-workers

General Relating Skills

- Interact with co-workers
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills

- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with co-workers
- Deal effectively with clients/customers/patients

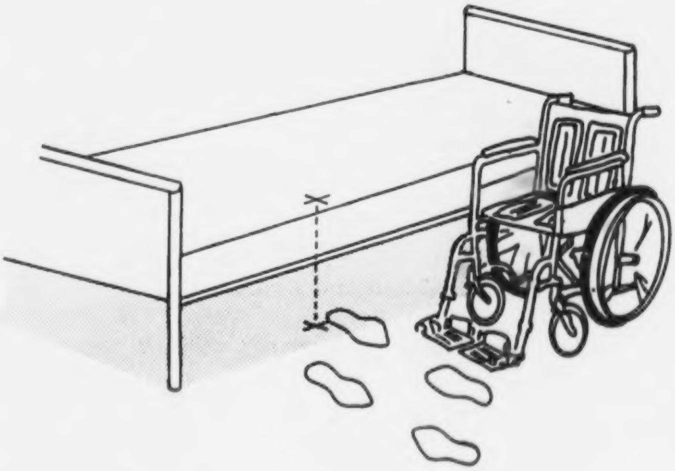
7. Gather robe and slippers.

8. Enlist sufficient help.

9. Explain procedure to the patient.

10. Place chair parallel to bed. Wheelchair should be securely locked with footrests folded out of way.

    NOTE: Chair should be at head of bed if patient will be lifted to chair. It may be at either head or foot for a patient who can assist.



Implementation

For patient who can assist.

11. Place bed in low position.

12. Raise head of bed.

13. Assist patient to dangle.

14. Assist patient with robe and slippers.

15. Stand facing patient with hands at patient's waist or axillary area and knee against patient's knee on weak side, if there is one. Knees should be bent and feet positioned for a broad base of support.

16. Instruct patient to place hands on nurse's shoulders, not neck.

17. On prearranged signal, straighten legs and assist patient to stand.

18. Instruct patient to pivot so back is to chair.

19. Instruct patient to feel chair against back of leg before sitting.

20. Bend knees and assist patient to lower body to chair.

For patient who cannot bear weight or assist

21. Remove arm rest from wheelchair, if possible, or adjust bed height to be level with arm rest.

22. Raise head of bed.

23. Position one nurse at head of bed behind chair and one at patient's feet. Both should flex knees and position feet for broad base of support.

    NOTE: One or more additional nurses may be needed for a large patient.

24. Instruct patient to cross arms over chest.

25. Nurse at head should slide arms under patient's axillary area.

26. Nurse at foot should support knees securely.

27. At prearranged signal, both nurses should lift patient to chair, keeping backs straight.

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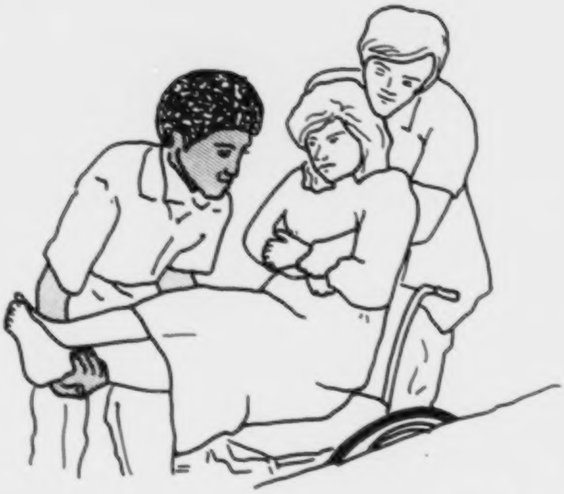

28. Place robe and slippers on patient.

29. Position patient for comfort using pillows as needed.

30. Position footrests in wheelchair.

31. Place blankets over patient as needed.

32. Place call light and personal effects in reach.

33. Wash hands.

Evaluation

34. Evaluate using following criteria

    a. Patient was kept in correct alignment with joints supported during move.

    b. Patient is positioned for comfort with joints supported in a position of function.

    c. Patient is warm and comfortable.

Documentation

35. Record and report
    - a. Transfer to chair.
    - b. Amount of assistance required.
    - c. Length of time up in chair.
    - d. Any positioning aids used.
    - e. Any complaints of patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 8

Refer to Instructional Supplement for Job Sheet 6.

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JOB SHEET 9

PROVIDE FOR PATIENT MOVEMENT

VIII

OBJECTIVE 16i

Assist a patient to ambulate.

INTRODUCTION

Patients should be encouraged to participate in the most activity their conditions will allow. This means that nurses frequently encourage patients to ambulate and assist them to do so. Precautions must be taken to ensure patient safety.

EQUIPMENT AND SUPPLIES

- Robe
- Slippers or shoes

  NOTE: These should fit securely and have non-skid soles.

- Gait belt if indicated

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions

Assessment and Analysis

1. Note any medical or nursing diagnoses which would alter procedure.
2. Determine amount of assistance patient will need.
3. Check for IV lines or other devices which would alter procedure.

Planning

4. Determine approximately how far patient should ambulate.
5. Obtain robe and slippers.
6. Explain procedure to patient.
7. Place bed in low position.
8. Prepare any tubing for transport

   EXAMPLES: IV tubing, catheters, etc.

Implementation

9. Assist patient to dangle.
10. Assist patient with robe and slippers.

- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Provide positive coaching

Job Acquisition/Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with clients/customers/patients

11. If a gait belt is to be used, fasten it securely around the patient's waist.

12. Assist patient to standing position as for transfer to chair.

13. Allow patient to stand for a few moments to adjust to upright position.

14. Slide arm nearest patient around waist and lock hand of farthest arm in patient's near hand.

    NOTE: This position provides for the maximum amount of support for patient.

15. For gait belt, stand behind and slightly to side of patient, grasping belt at the back.

16. Encourage patient to stand straight.

    NOTE: Patients who have undergone surgery tend to slump over in an effort to minimize pain.

17. Walk at comfortable pace for patient.

18. Encourage patient to walk as far as possible.

Evaluation

19. Evaluate according to following criteria

    a. Patient was able to walk prescribed distance.

    b. Patient did not become faint or excessively fatigued.

    c. Patient maintained appropriate posture.

Documentation

20. Record and report

    a. Distance walked.

    b. Assistance required.

    c. Any complaints of patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 9

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

— Providing positive coaching

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty providing positive coaching:
  - Review their roles in a specific procedure.
  - Discuss the effects of encouragement and a positive attitude on the patient.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1

JOB SHEET 10 — PROVIDE FOR PATIENT MOVEMENT — VIII

OBJECTIVE 16j

Assist a patient to ambulate with assistance devices.

INTRODUCTION

Many patients have difficulty ambulating without help, but they can be ambulatory with some device to assist. In most health care settings, a physical therapist will have the primary responsibility in teaching patients to use these aids. However, it is a good idea for the nurse to also understand their use to reinforce teaching and correct any problems the patient may have.

EQUIPMENT AND SUPPLIES

- Cane, walker, or crutches as prescribed.

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)
- Use content area vocabulary

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Assess patient's ability to understand and follow instructions.
2. Assess patient's arm strength and movement.

   NOTE: The arms are used to manipulate the devices. If the patient cannot use the arms satisfactorily, the aid cannot be used.

3. Determine whether patient can bear weight on one or both legs
4. Note any medical or nursing diagnoses which would alter procedure.
5. Assess patient's understanding of use of ambulation aid

Planning

6. Check to see that ambulation device is in good repair with hand grips and rubber caps on all tips.

   NOTE: Some may have wheels instead of rubber caps. Check to see that wheels are securely attached and in good repair.

7. Have patient wear shoes that fit securely and have non-skid soles.

8. Check for proper sizing.

   a. Cane should extend to greater trochanter and arm should be bent at 15-30 degrees.

   b. Walker should be at height where patient stands erect with arms bent at 15-30 degrees.

   c. Axillary crutches should have two fingers of space between top of crutch and axillary area with arms bent at 20-30 degrees and crutch extended six inches to side and front of foot.

CAUTION!

AXILLARY INJURY POSSIBLE. Resting weight on axillary areas can cause injury. Properly sized axillary crutches should be selected.

---

9. Provide uncluttered area for ambulation.

10. If patient feels insecure, use gait belt.

Implementation

11. Cane

   a. Have patient hold cane on uninvolved side, close to body.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with clients/customers/patients

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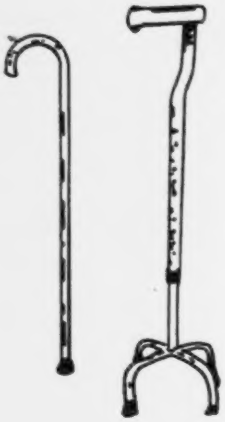
b. Cane and involved side should be advanced at same time, followed by uninvolved side.
or
Advance cane, involved side, and then uninvolved side.

NOTE: This method offers more support for weaker patients.

Canes

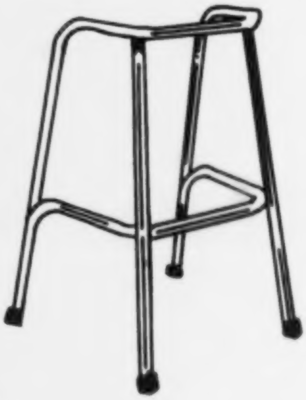


12. Walker

a. Have patient grasp hand grip firmly.

b. Walker and weak leg should be advanced, followed by strong leg.

Walker



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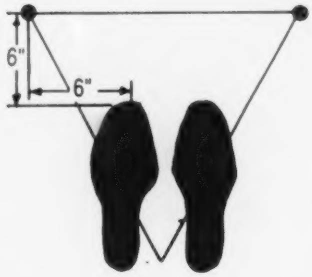
13. Axillary crutches

a. Begin with crutches six inches to side and six inches in front of foot (tripod position).

Tripod position



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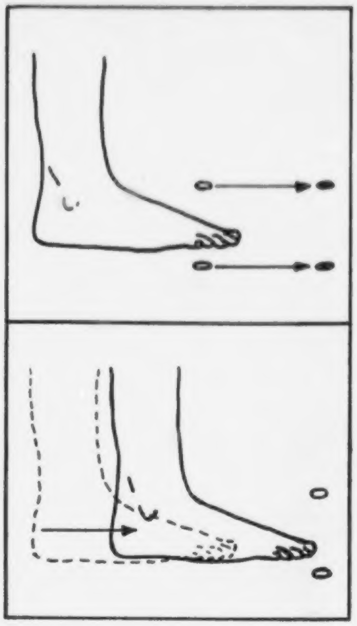
b. For three-point gait

NOTE: This can be used when the weak leg should not bear weight.

1) Advance both crutches and weak leg.

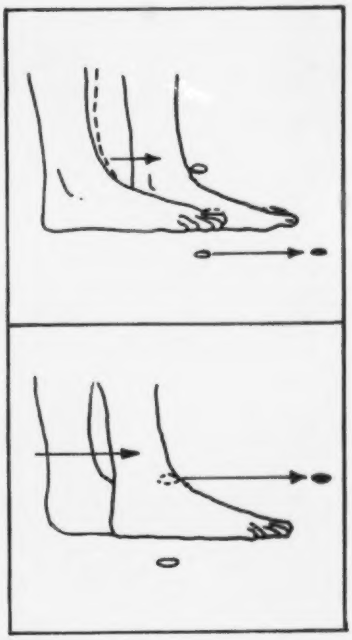
2) Follow with strong leg.



c. For two-point gait

1) Advance left crutch and right leg.

2) Then advance right crutch and left leg.



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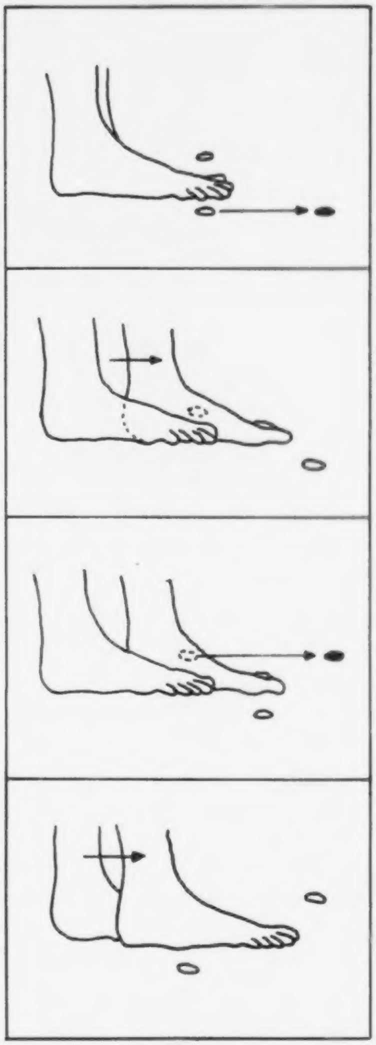
d. For four-point gait

1) Advance right crutch.

2) Advance left foot.

3) Advance left crutch.

4) Advance right foot.

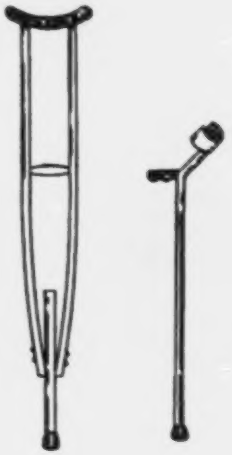


e. For steps

1) When going up, advance strong leg first, followed by crutches and weak leg.

2) When going down, advance weak leg and crutches first, followed by strong leg.

14. Other types of crutches require special instructions



Crutches

15. Instruct patient to keep back straight.

Evaluation

16. Evaluated according to following criteria.

    a. Patient ambulates smoothly without falls.
    b. Patient does not become overly tired.
    c. Patient does not complain of pain.
    d. Patient uses equipment properly.

Documentation

17. Record and report

    a. Distance ambulated.
    b. Any difficulty in coordinating movements.
    c. Any complaints of fatigue or pain.

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PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 10

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

— Using content area vocabulary

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheets 1 and 3.

JOB SHEET 11

PROVIDE FOR PATIENT MOVEMENT

VIII

OBJECTIVE 16k **Assist a falling patient.**

INTRODUCTION When patients are ambulating, they may start to fall. The nurse should be alert for such occasions and be prepared to assist in a way which will minimize injuries.

EQUIPMENT AND SUPPLIES None

PROCEDURE

Assessment and Analysis

1. Note any medical or nursing diagnoses which would make a patient especially prone to falls.
2. Observe patient closely to detect signs of weakness or orthostatic hypotension.

Planning

3. Explain to patient that you will be nearby to assist.
4. Instruct patient to notify you immediately of any dizziness or other symptoms.

Implementation

5. Assume broad-based stance.
6. Support patient on each side at mid-chest level.
7. Pull patient backward against hip and thigh.

   NOTE: The patient will tend to fall forward, possibly causing injury to head, hips, and knees.

8. Lower patient gently to floor, using own body for support.
9. Stay with patient and call for help.

Evaluation

10. Patient is lowered to floor without injury.

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

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General Relating Skills

- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills

- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with customers/clients

Documentation

11. Record and report

    a. Circumstances surrounding incident.

    b. Assessment of patient.

    c. Persons notified.

    d. Actions taken.

    NOTE: Incident report should be completed.

PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 11

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION

- Giving/following oral directions
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1.

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JOB SHEET 12 — PROVIDE FOR PATIENT MOVEMENT — VIII

OBJECTIVE 16I

Transfer a patient to a carrier.

INTRODUCTION

When patients are transported by carrier, they may need a great deal of assistance in transferring from the bed to the carrier. There are several techniques which can be used, depending upon the patient's ability to assist.

EQUIPMENT, SUPPLIES, AND PERSONNEL

- Carrier

  NOTE: May also be called a gurney or stretcher.

- 3 people to assist
- Sheet for use on carrier
- Bath blanket
- Drawsheet
- Transfer board (optional)

PROCEDURE

Assessment and Analysis

1. Note any medical or nursing diagnoses which would alter the technique.
2. Assess patient's ability to assist in transfer.
3. Check for equipment such as IV tubing, catheters, etc.

Planning

4. Enlist help from other nurses.
5. Wash hands.
6. Obtain carrier.
7. Obtain linen to cover carrier.
8. Cover carrier with clean sheet.
9. Explain procedure to patient.
10. Provide privacy.

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

- Communicate with co-workers

General Relating Skills
- Interact with clients/customers/patients
- Interact with co-workers

Job Acquisition/Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with co-workers
- Deal effectively with clients/customers/patients

11. Prepare any tubing or equipment for transfer.

12. Remove pillow.

Implementation

13. **For patient who can assist.**

    a. Place bath blanket over patient and fanfold top linens to foot of bed.

    b. Position carrier next to bed.

    c. Lock wheels of bed and carrier.

    d. Raise bed until it is even with carrier.

    e. Reaching over carrier, hold on to headboard and push carrier firmly to bed.

    f. Instruct patient to slide to carrier.

    g. Guide bath blanket as patient slides to carrier.

14. **For patient who cannot assist**

    a. Enlist help of two or more nurses.

    b. Place bath blanket over patient and fanfold linen to foot of bed.

    c. Loosen drawsheet or place one for turning sheet.

    d. Place carrier next to bed.

    e. Lock wheels of bed and carrier.

    f. Raise bed to same height as carrier.

    g. Position at least two nurses on side with stretcher and at least one nurse on opposite side.

    NOTE: Number of assistants will depend upon size of patient.

    h. Instruct patient to cross hands over chest.

i. Have all nurses grasp drawsheet and roll close to patient.

j. On prearranged signal, all nurses should move patient to edge of bed next to carrier.

k. Nurse(s) on side of bed opposite carrier should kneel on the bed and grasp drawsheet.

l. Nurses on side of carrier should grasp drawsheet.

m. On prearranged signal the nurses should move patient to carrier.

15. Use a transfer board to transfer patient

    a. Place carrier next to bed.

    b. Lock wheels of bed and carrier.

    c. Raise bed to same height as carrier.

    d. Position transfer board over gap between bed and carrier.

    e. Position assistants on either side of bed and loosen drawsheet or use turning sheet.

    f. Use drawsheet to smoothly pull patient to carrier.

    NOTE: Rollers on the transfer board help move the patient easily.

16. Three-man lift to carrier

    a. Position carrier at right angle to bed at foot.

    b. Lock wheels of bed and carrier.

    c. Raise bed to comfortable working height.

    d. Position one person at head to support head, neck, and chest; one to support mid-portion, of body and one to support legs.

    NOTE: Usually the tallest person should be at the head and the shortest at the legs.

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e. Instruct patient to fold arms across chest.

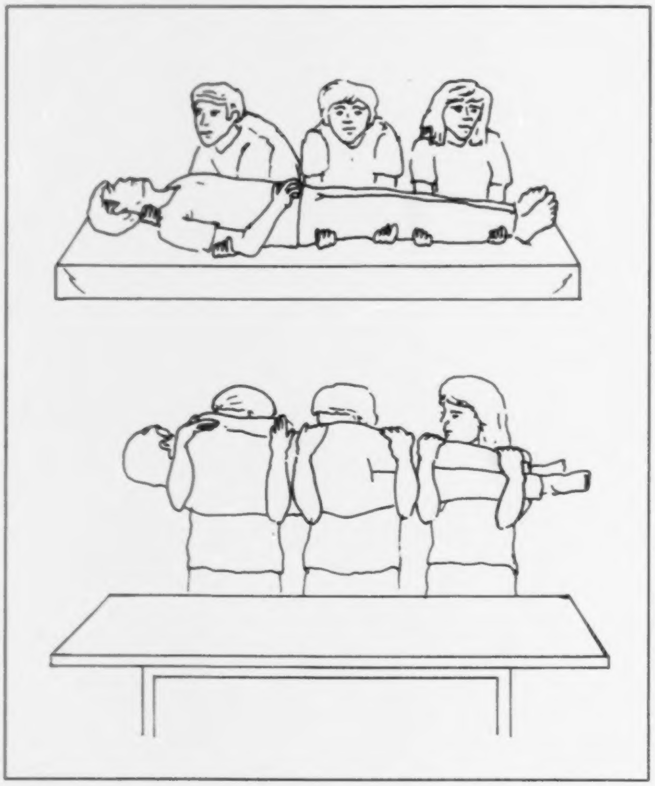
f. On signal, all three slide hands and forearms under assigned portion of body.

g. On a second signal, all lift patient and roll him/her toward their chests.

h. All nurses step backward and pivot to face the carrier.

i. All walk toward carrier.

j. All rest patient on carrier and pull arms from under patient.



17. Raise siderails or fasten safety belt.

18. Provide blanket and pillow for comfort.

19. Reposition any tubing or equipment.

20. Unlock wheels and transfer patient by pushing feet first.

Evaluation

21. Evaluate using the following criteria
    a. Patient was transferred smoothly.
    b. Patient does not experience unusual amount of pain.

Documentation

22. Record and report
    a. Destination of patient.
    b. Amount of assistance required.
    c. Any complaints of patient.

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PROVIDE FOR PATIENT MOVEMENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 12

Skill development for: READING SKILLS
WRITING SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients
- Communicating with co-workers

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Interacting with co-workers

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure

- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with co-workers
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheets 1 and 4.

JOB SHEET 13

PROVIDE FOR PATIENT MOVEMENT

VIII

OBJECTIVE 16m

Use a mechanical lift.

INTRODUCTION

When patients are very large or when they cannot participate in their transfer at all, a mechanical lift may be used. Nurses must be familiar with its operation to prevent injury. Patients are frequently fearful of being transferred with a lift. The nurse must reassure the patient and demonstrate competence to put the patient at ease.

EQUIPMENT, SUPPLIES, AND PERSONNEL

- Mechanical lift
- Chair for patient
- 1 assistant

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients
- Communicate with co-workers

Assessment and Analysis

1. Note any medical or nursing diagnoses which would contraindicate using the lift.

2. Check for equipment such as IV tubing or catheters.

Planning

3. Check manufacturer's specifications for allowable lifting weight for model used.

4. Familiarize self with operation of lift.

5. Enlist aid of assistant to stabilize patient during transfer.

6. Obtain lift and chair.

7. Wash hands.

8. Explain procedure to patient.

9. Place chair in position next to bed.

10. Position patient on side and place cloth sling of lift in position under back and buttocks, fanfolding portion next to patient.

11. Turn patient to other side and adjust sling to correct position.

General Relating Skills

- Interact with co-workers
- Interact with clients/customers/patients

Job Acquisition/Development Skills

- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with co-workers
- Deal effectively with clients/customers/patients

12. Turn patient to back.

13. Move lift into place and attach hooks to sling.

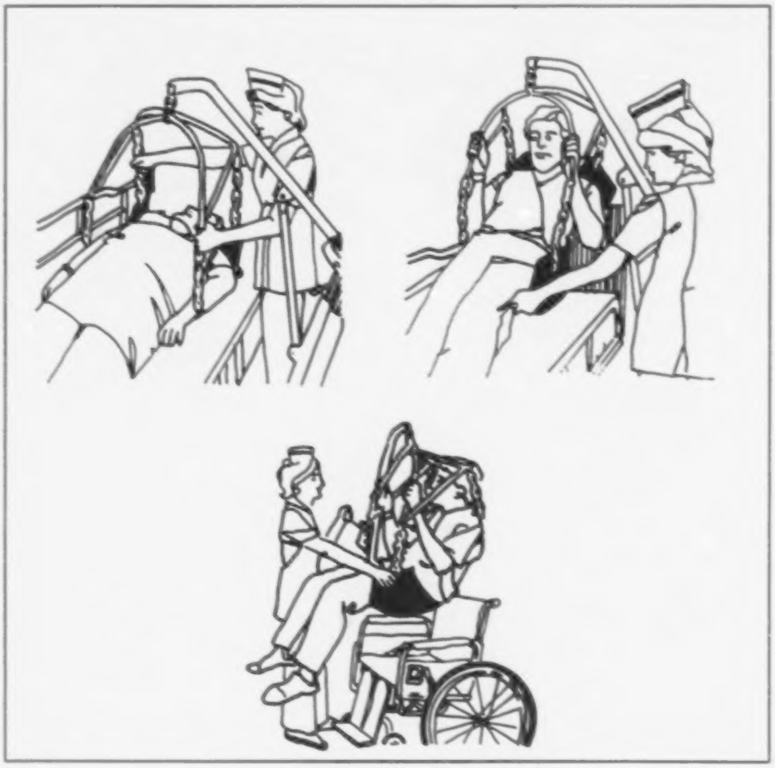
14. Following manufacturer's directions, begin lifting patient from bed, checking position in sling as he/she is moved upward.

15. Have an assistant guide patient's body as lift is moved, until patient is in position over chair.

16. *SLOWLY* lower patient into chair.

17. Unfasten hooks from sling.

18. Reposition patient as needed and adjust any tubing or equipment.



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Evaluation

19. Evaluate using following criteria
    a. Transfer was completed without difficulty.
    b. Patient is correctly positioned in chair.

Documentation

20. Record and report
    a. Transfer to chair.
    b. Any complaints of patient.
    c. Ability of patient to follow directions and assist.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 13

Skill development for:
READING SKILLS
WRITING SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients
- Communicating with co-workers

INTERPERSONAL/RELATING SKILLS

- Interacting with co-workers
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure

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- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with co-workers
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheets 1 and 4.

JOB
SHEET 14

PROVIDE FOR PATIENT MOVEMENT

VIII

OBJECTIVE 16n

Apply safety devices.

INTRODUCTION

When safety devices are needed, the nurse must be skilled at applying and maintaining them in a manner to prevent injury and protect the patient. Choose the device which will offer the most protection with the least amount of restraint.

EQUIPMENT AND SUPPLIES

- Safety device
- Padding for limb restraints if it is not sufficiently padded
- Cloth or gauze roll for clove hitch restraint

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions

Assessment and Analysis

1. Try to determine reason for patient's disorientation or agitation.
2. Note medical or nursing diagnoses which would alter procedure.
3. Assess body part where safety device will be applied to determine condition of skin.
4. Determine range of motion present in joints to be restrained prior to application.

Planning

5. Choose appropriate safety device.
6. Follow agency policy in relation to obtaining doctor's order.
7. Explain need for safety device to patient and family.

Implementation

8. Use a knot that can be easily untied if necessary.
9. Check patient frequently noting respirations and circulation.
10. Unfasten patient at least every two hours.
    a. Inspect skin.
    b. Exercise all joints.

- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Cognitive Activity Skills
- Identify critical elements/issues

Job Acquisition/Development Skills
- Master specific job task/procedure
- Practice good work habits/attitudes
- Apply safety practices/procedures
- Deal effectively with clients/customers/patients

c. Reposition.

d. Offer fluids.

e. Assist patient to bathroom or provide bedpan or urinal.

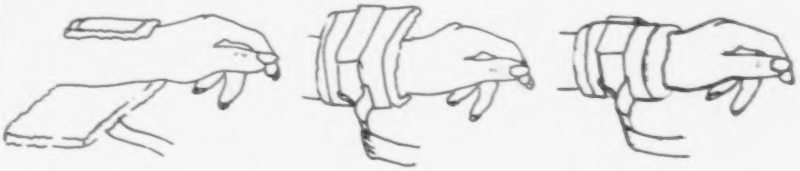
11. Assist with feeding at mealtimes.

12. **Limb restraint**

a. Apply padding material if safety device is not padded.

b. Wrap device around limb securely, but not in a manner to restrict circulation.

NOTE: See manufacturer's instructions for specific directions.



c. Attach ties to *frame* of bed or chair.

CAUTION!

LIMB INJURY POSSIBLE. Tying device to moving part of bed or chair could result in injury to limb. Attach ties to frame of bed or chair.

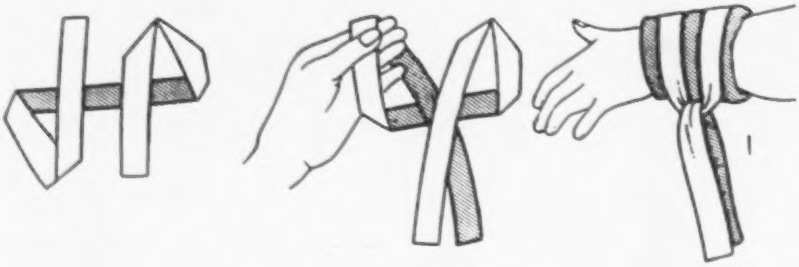
13. **Clove hitch limb restraint**

a. Unroll gauze or cloth.

b. Make a figure eight at center of strip with tails going in opposite directions.

c. Pick up loops from outside edges and pass limb through both loops.

d. Pull tails until clove hitch fits securely around part without restricting circulation.



e. Fasten tails to *frame* of bed or chair.

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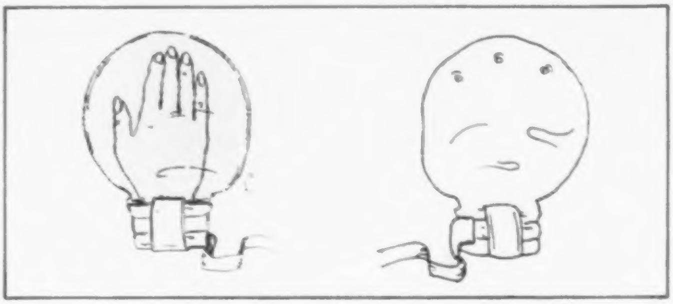
14. **Mitten**

a. Place hand in mitten and secure at wrist.

NOTE: Hand roll may be used to maintain position of function.

b. Fasten ties to *frame* of bed or chair.

NOTE: A mitten-type device can be made using stockinette and tape.



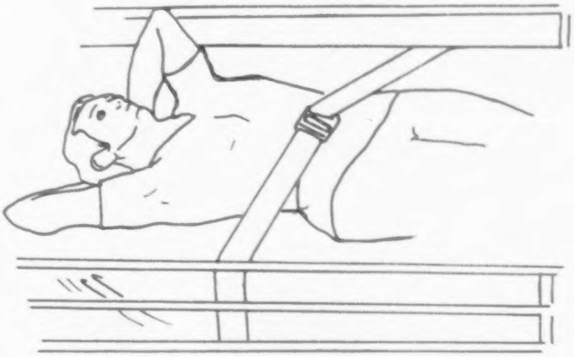
15. **Belt**

a. Position belt on bed at level where patient's waist will be.

b. Secure belt to frame of bed.

c. Place patient on belt and fasten belt at patient's waist.

d. Check to see that belt is secure, but does not interfere with respirations.

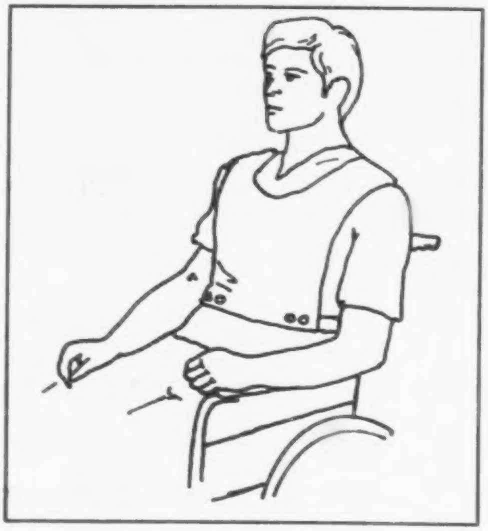


16. **Vest or jacket**

a. Place vest or jacket on patient by pulling over head or placing arms through armholes.

b. Fasten closings or ties securely, but not in a manner to interfere with respirations.

c. Fasten ties to *frame* of bed or wheelchair.



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17. **Crotch restraint**

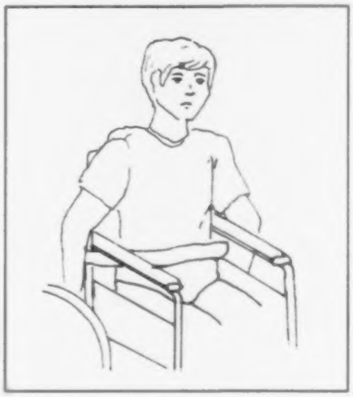
   a. Turn patient to side and place back portion against buttocks.

   b. Turn to other side to position opposite side of device.

   c. Bring front portion between legs.

   d. Tie front and back together at sides.

   e. Secure ties to *frame* of bed or chair.



Evaluation

18. Evaluate using the following criteria

   a. Patient is not a threat to own safety or safety of others.

   b. Patient is observed at regular intervals.

   c. No injury or loss of function occurs as a result of safety device.

Documentation

19. Record and report

   a. Complete assessment of patient's behavior before application of safety device.

   b. Actions to provide for patient safety or safety of others.

c. Explanation given to patient and family.

d. Type of device applied.

e. Condition of skin and range of joint movement before application.

f. Actions to avoid complications including observations, release of device, exercises, offering fluids, toileting.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 14

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
CREATIVE THINKING AND PROBLEM-SOLVING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, creative thinking and problem-solving, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients

CREATIVE THINKING AND PROBLEM-SOLVING SKILLS

- Identifying critical elements/issues

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty identifying critical elements/issues:
  - Remind them to read, observe, and listen carefully
  - Review the information, noting key ideas.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1.

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PRACTICAL TEST 1

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 1

Perform passive range of motion exercises.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for any medical or nursing diagnoses which would contraindicate or alter procedure.	____	____
2. Assessed physical condition of joints.	____	____
3. Assessed movement possible in joints.	____	____
4. Assessed patient's understanding of importance of range of motion exercises.	____	____
5. Determined number of times each joint will be exercised.	____	____
6. Planned to		
a. Support joints during movement.	____	____
b. Move joints slowly and gently.	____	____
c. Move joints to point of slight resistance, but do not force joint.	____	____

		YES	NO
d.	Follow a pattern to include all possible movements for each joint.		
e.	Observe patient closely for signs of pain.		
f.	Return all joints to neutral position at completion of each exercise.		
7.	Washed hands.		
8.	Explained procedure to patient.		
9.	Raised bed to comfortable working height.		
10.	Positioned patient in supine position.		
11.	Moved patient close to side of bed where you will be standing.		
12.	Removed top covers and covered patient with bath blanket.		
13.	Exercised the neck.		
14.	Exercised the shoulder.		
15.	Exercised the elbow and lower arm.		
16.	Exercised the wrist.		
17.	Exercised the fingers.		
18.	Exercised the hip and knee.		
19.	Exercised the ankle and foot.		
20.	Exercised the toes.		
21.	Replaced top covers.		
22.	Placed patient in comfortable position.		

	YES	NO
23. Returned bed to lowest level.		
24. Washed hands.		
25. Evaluated according to established criteria.		
26. Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
	4	3	2	1
Used appropriate movements for each joint				
	4	3	2	1
Completed procedure correctly				

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

____________ ________________________
(Date) (Evaluator's Signature)

____
(Evaluator's Position)

PRACTICAL TEST 2

PROVIDE FOR PATIENT MOVEMENT VIII

JOB SHEET 2

Instruct patient in active range of motion exercises.

STUDENT'S NAME ____________ DATE ____________

EVALUATOR'S NAME ____________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for any medical or nursing diagnoses which would contraindicate or alter procedure.	____	____
2. Assessed physical condition of joints.	____	____
3. Assessed movement possible in joints.	____	____
4. Assessed patient's understanding of importance of range of motion exercises.	____	____
5. Explained procedure to patient, including the benefits of active movement. Cautioned patient not to push beyond resistance.	____	____
6. Had the patient wear clothing to permit active movement.	____	____
7. Provided a safe place for exercising.	____	____
8. Instructed the patient to exercise the neck.	____	____

	YES	NO
9. Instructed the patient to exercise the shoulder.	____	____
10. Instructed the patient to exercise the elbow and forearm.	____	____
11. Instructed the patient to exercise the wrist.	____	____
12. Instructed the patient to exercise fingers.	____	____
13. Instructed the patient to exercise hip and knee by lying in supine position.	____	____
14. Instructed the patient to exercise ankle and foot.	____	____
15. Instructed the patient to exercise toes.	____	____
16. Evaluated according to established criteria.	____	____
17. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Provided clear instructions to patient	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

________________ (Date)

________________________________ (Evaluator's Signature)

________________________________ (Evaluator's Position)

PROVIDE FOR PATIENT MOVEMENT

JOB SHEET 3

Apply anti-embolism stockings.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for medical or nursing diagnoses which would contraindicate anti-embolism stockings.	_____	_____
2. Inspected the legs for signs of skin lesions.	_____	_____
3. Identified patient.	_____	_____
4. Explained procedure, making sure patient understands need for stockings.	_____	_____
5. Determined what length stockings are needed.	_____	_____
6. Obtained correct size stockings.	_____	_____
7. Had patient lie down with legs elevated for at least 15 minutes before applying stockings.	_____	_____
8. Raised bed to comfortable working height.	_____	_____

	YES	NO
9. Put a small amount of powder on patient's legs.	____	____
10. Turned entire stocking inside out.	____	____
11. Placed patient's foot into foot of stocking and pulled stocking over foot.	____	____
12. Pulled stocking up over rest of leg to correct length, making sure it fit smoothly without wrinkles or creases.	____	____
13. Checked toes for adequate circulation (color, skin temperature, presence of edema, capillary refill, and pedal pulse).	____	____
14. Removed stockings once every eight hours and re-evaluated condition of skin and circulatory status.	____	____
15. Changed stockings if they were soiled.	____	____
16. Evaluated according to established criteria.	____	____
17. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Obtained appropriate size stocking	4	3	2	1
Stocking fit contours of leg appropriately	4	3	2	1

EVALUATOR'S COMMENTS

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

______________ (Date)

______________________________ (Evaluator's Signature)

______________________________ (Evaluator's Position)

PRACTICAL TEST 4

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 4

Position the patient in the supine, prone, lateral, Fowler's and Sim's positions.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for any medical or nursing diagnoses which would limit positions patient could assume.	____	____
2. Determined how much assistance patient will need.	____	____
3. Checked for presence of equipment.	____	____
4. Obtained sufficient help.	____	____
5. Assembled any equipment needed.	____	____
6. Washed hands.	____	____
7. Explained procedure to patient, making sure he understands need for frequent/repositioning.	____	____
8. Elevated bed to comfortable working height.	____	____
9. Placed patient in supine position.	____	____

	YES	NO
10. Placed patient in prone position.	____	____
11. Positioned patient in lateral position.	____	____
12. Placed patient in Fowler's position.	____	____
13. Placed patient in Sim's position.	____	____
14. Placed call light in reach.	____	____
15. Lowered bed to level nearest floor, and raised siderails as indicated.	____	____
16. Evaluated according to established criteria.	____	____
17. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 5	**PROVIDE FOR PATIENT MOVEMENT** VIII

PRACTICAL TEST 5

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 5

Use a turning sheet.

STUDENT'S NAME ______________ DATE __________

EVALUATOR'S NAME ______________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses which would make a turning sheet useful.	____	____
2. Assessed patient's ability to assist in turning for placement.	____	____
3. Washed hands.	____	____
4. Obtained drawsheet.	____	____
5. Obtained assistance.	____	____
6. Explained procedure to patient.	____	____
7. Raised bed to comfortable working height.	____	____
8. Assisted patient to turn to side.	____	____
9. Unfolded drawsheet and re-folded in half, lengthwise.	____	____
10. Placed on bed with fold under patient's shoulders and loose edges even with edge of mattress.	____	____

		YES	NO
11.	Fanfolded opposite edge close to patient.	____	____
12.	Assisted patient to turn on to sheet.	____	____
13.	Pulled opposite side of sheet flat and smooth.	____	____
14.	With assistant, rolled turning sheet close to either side of patient.	____	____
15.	On pre-arranged signal, lifted turning sheet and patient and repositioned or moved as needed.	____	____
16.	Made patient comfortable.	____	____
17.	Provided with call light.	____	____
18.	Lowered bed to position nearest floor.	____	____
19.	Evaluated according to established criteria.	____	____
20.	Documented appropriately.	____	____

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

__________ (Date)

____________________ (Evaluator's Signature)

____________________ (Evaluator's Position)

JOB SHEET 6

Logroll a patient.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses which would alter procedure.	____	____
2. Determined amount of assistance required.	____	____
3. Determined whether draw sheet or turning sheet is in place.	____	____
4. Obtained sufficient help.	____	____
5. Washed hands.	____	____
6. Assembled pillows or blanket rolls.	____	____
7. Explained procedure to patient.	____	____
8. Elevated bed to comfortable working height.	____	____
9. Instructed patient to cross arms across chest or place arms in that position.	____	____

	YES	NO
10. Without turning sheet:		
a. Had all assistants stand on one side of bed and gently extended arms under patient to support entire body.	____	____
b. On signal, pulled patient to edge of bed.	____	____
c. Positioned a small pillow under patient's head and a second pillow between legs.	____	____
d. Raised siderail.	____	____
e. Assistants moved to opposite side of bed.	____	____
f. Pulled patient smoothly to side on signal.	____	____
11. With a turning sheet or drawsheet:		
a. Rolled turning sheet close to patient.	____	____
b. Moved patient to edge of one side of bed on signal.	____	____
c. Positioned pillow under patient's head and a second pillow between legs.	____	____
d. Raised siderail.	____	____
e. Assistants moved to opposite side of bed.	____	____
f. Used turning sheet to pull patient smoothly to side on signal.	____	____
12. Placed pillows behind patient and under upper arm for support.	____	____
13. Placed call light in reach.	____	____

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	YES	NO
14. Lowered bed to level nearest floor and raised siderails.	_____	_____
15. Washed hands.	_____	_____
16. Evaluated according to established criteria.	_____	_____
17. Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

____________ ________________________
(Date) (Evaluator's Signature)

____
(Evaluator's Position)

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PRACTICAL TEST 7

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 7

Assist a patient to dangle.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed patient's ability to assist.	_____	_____
2. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
3. Washed hands.	_____	_____
4. Assembled equipment.	_____	_____
5. Explained procedure to patient.	_____	_____
6. Checked to make sure bed is in low position.	_____	_____
7. Checked pulse.	_____	_____
8. Assisted patient to move close to edge of bed.	_____	_____
9. Raised head of bed.	_____	_____

	YES	NO
10. For patient needing assistance:		
a. Pulled legs to edge of bed.	____	____
b. Slid one arm around patient's shoulders and other arm under thighs, just above knees.	____	____
c. Pulled patient to sitting position with legs over edge of bed.	____	____
11. Instructed patient who is learning to assist self to:		
a. Turn to side.	____	____
b. Place far or upper leg over edge of bed.	____	____
c. Reach with far or upper arm for edge of mattress or siderail.	____	____
d. Push up with arms and slide legs over side of bed.	____	____
12. Helped stabilize patient.	____	____
13. Placed slippers on feet and robe or blanket over shoulders.	____	____
14. Checked pulse.	____	____
15. Observed patient closely for signs of weakness or fainting.	____	____
16. Evaluated according to established criteria.	____	____
17. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 8

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 8

Transfer a patient to a chair or wheel chair.

STUDENT'S NAME ________________ DATE ____________

EVALUATOR'S NAME ________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's ability to help with procedure.	_____	_____
2. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
3. Determined type of chair needed.	_____	_____
4. Washed hands.	_____	_____
5. Obtained chair.	_____	_____
6. Placed bath blanket or other covering in chair.	_____	_____
7. Gathered robe and slippers.	_____	_____
8. Enlisted sufficient help.	_____	_____
9. Explained procedure to the patient.	_____	_____
10. Placed chair parallel to bed. Wheelchair should be securely locked with footrests folded out of way.	_____	_____

	YES	NO
For patient who could assist:		
11. Placed bed in low position.	____	____
12. Raised head of bed.	____	____
13. Assisted patient to dangle.	____	____
14. Assisted patient with robe and slippers.	____	____
15. Stood facing patient with hands at patient's waist or axillary area and knee against patient's knee on weak side, if there was one.	____	____
16. Instructed patient to place hands on nurse's shoulders, not neck.	____	____
17. Straightened legs and assisted patient to stand, on prearranged signal.	____	____
18. Instructed patient to pivot so back is to chair.	____	____
19. Instructed patient to feel chair against back of leg before sitting.	____	____
20. Bent knees and assisted patient to lower body to chair.	____	____
For patient who could not bear weight or assist:		
21. Removed arm rest from wheelchair, if possible, or adjusted bed height to be level with arm rest.	____	____
22. Raised head of bed.	____	____
23. Positioned one nurse at head of bed behind chair and one at patient's feet.	____	____
24. Instructed patient to cross arms over chest.	____	____

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	YES	NO
25. Nurse at head slid arms under patient's axillary area.	____	____
26. Nurse at foot supported knees securely.	____	____
27. At prearranged signal, both nurses lifted patient to chair, keeping backs straight.	____	____
28. Placed robe and slippers on patient.	____	____
29. Positioned patient for comfort using pillows as needed.	____	____
30. Positioned footrests in wheelchair.	____	____
31. Placed blankets over patient as needed.	____	____
32. Placed call light and personal effects in reach.	____	____
33. Washed hands.	____	____
34. Evaluated according to established criteria.	____	____
35. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 9 — PROVIDE FOR PATIENT MOVEMENT — VIII

JOB SHEET 9

Assist a patient to ambulate.

STUDENT'S NAME ________________ DATE ____________

EVALUATOR'S NAME ________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses which would alter procedure.	____	____
2. Determined amount of assistance patient will need.	____	____
3. Checked for IV lines or other devices which would alter procedure.	____	____
4. Determined approximately how far patient should ambulate.	____	____
5. Obtained robe and slippers.	____	____
6. Explained procedure to patient.	____	____
7. Placed bed in low position.	____	____
8. Prepared any tubing for transport.	____	____
9. Assisted patient to dangle.	____	____
10. Assisted patient with robe and slippers.	____	____

		YES	NO
11.	Fastened gait belt, if used, securely around the patient's waist.	____	____
12.	Assisted patient to standing position as for transfer to chair.	____	____
13.	Allowed patient to stand for a few moments to adjust to upright position.	____	____
14.	Slid arm nearest patient around waist and locked hand of farthest arm in patient's near hand.	____	____
15.	Stood behind and slightly to side of patient, grasping belt at the back.	____	____
16.	Encouraged patient to stand straight.	____	____
17.	Walked at comfortable pace for patient.	____	____
18.	Encouraged patient to walk as far as possible.	____	____
19.	Evaluated according to established criteria.	____	____
20.	Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 10

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 10

Assist a patient to ambulate with assistance devices.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed patient's ability to understand and follow instructions.	_____	_____
2. Assessed patient's arm strength and movement.	_____	_____
3. Determined whether patient could bear weight on one or both legs.	_____	_____
4. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
5. Assessed patient's understanding of use of ambulation aid.	_____	_____
6. Checked to see that ambulation device was in good repair with hand grips and rubber caps on all tips.	_____	_____
7. Had patient wear shoes that fit securely and had non-skid soles.	_____	_____
8. Checked for proper sizing.	_____	_____

	YES	NO
9. Provided uncluttered area for ambulation.	_____	_____
10. Used gait belt, if patient felt insecure.	_____	_____
11. For cane:		
a. Had patient hold cane on uninvolved side, close to body.	_____	_____
b. Instructed patient to advance cane and involved side at same time followed by uninvolved side or instructed patient to advance cane, involved side, and then uninvolved side.	_____	_____
12. For walker:		
a. Had patient grasp hand grip firmly.	_____	_____
b. Instructed patient to advance walker and weak leg then strong leg.	_____	_____
13. For axillary crutches:		
Had patient begin with crutches six inches to side and six inches in front of foot (tripod position).	_____	_____
a. For three-point gait, had patient advance both crutches and weak leg and follow with strong leg.	_____	_____
b. For two-point gait, had patient advance left crutch and right leg, then advance right crutch and left leg.	_____	_____
c. For four-point gait, had patient advance right crutch, left foot, left crutch and right foot.	_____	_____
d. For going up steps, had patient advance strong leg first, then crutches and weak leg.	_____	_____

		YES	NO
	e. For going down steps, had patient advance weak leg and crutches first, then strong leg.		
14.	Provided instructions for other types of crutches if used.		
15.	Instructed patient to keep back straight.		
16.	Evaluated according to established criteria.		
17.	Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Provided clear instructions	4	3	2	1
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 11

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 11

Assist a falling patient.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses which would make a patient especially prone to falls.	____	____
2. Observed patient closely to detect signs of weakness or orthostatic hypotension.	____	____
3. Explained to patient that you would be nearby to assist.	____	____
4. Instructed patient to notify you immediately of any dizziness or other symptoms.	____	____
5. Assumed broad-based stance.	____	____
6. Supported patient on each side at mid-chest level.	____	____
7. Pulled patient backward against hip and thigh.	____	____
8. Lowered patient gently to floor, using own body for support.	____	____

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	YES	NO
9. Stayed with patient and called for help.		
10. Evaluated according to established criteria.		
11. Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria	4	3	2	1
Completed procedure correctly				

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 12

PROVIDE FOR PATIENT MOVEMENT

JOB SHEET 12

Transfer a patient to a carrier.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses which would alter the technique.	_____	_____
2. Assessed patient's ability to assist in transfer.	_____	_____
3. Checked for equipment such as IV tubing, catheters, etc.	_____	_____
4. Enlisted help from other nurses.	_____	_____
5. Washed hands.	_____	_____
6. Obtained carrier.	_____	_____
7. Obtained linen to cover carrier.	_____	_____
8. Covered carrier with clean sheet.	_____	_____
9. Explained procedure to patient.	_____	_____
10. Provided privacy.	_____	_____

			YES	NO
11.	Prepared any tubing or equipment for transfer.			
12.	Removed pillow.			
13.	**For patient who could assist:**			
	a.	Placed bath blanket over patient and fanfolded top linens to foot of bed.		
	b.	Positioned carrier next to bed.		
	c.	Locked wheels of bed and carrier.		
	d.	Raised bed until it was even with carrier.		
	e.	Reaching over carrier, held on to headboard and pushed carrier firmly to bed.		
	f.	Instructed patient to slide to carrier.		
	g.	Guided bath blanket as patient slid to carrier.		
14.	**For patient who could not assist:**			
	a.	Enlisted help of two or more nurses.		
	b.	Placed bath blanket over patient and fanfolded linen to foot of bed.		
	c.	Loosened drawsheet or placed one for turning sheet.		
	d.	Placed carrier next to bed.		
	e.	Locked wheels of bed and carrier.		
	f.	Raised bed to same height as carrier.		

		YES	NO
g.	Positioned at least two nurses on side with stretcher and at least one nurse on opposite side.	____	____
h.	Instructed patient to cross hands over chest.	____	____
i.	Had all nurses grasp drawsheet and roll close to patient.	____	____
j.	On prearranged signal, all nurses moved patient to edge of bed next to carrier.	____	____
k.	Nurse(s) on side of bed opposite carrier knelt on the bed and grasped drawsheet.	____	____
l.	Nurses on side of carrier grasped drawsheet.	____	____
m.	On prearranged signal, the nurses moved patient to carrier.	____	____
15.	For transfer board:		
a.	Placed carrier next to bed.	____	____
b.	Locked wheels of bed and carrier.	____	____
c.	Raised bed to same height as carrier.	____	____
d.	Positioned transfer board over gap between bed and carrier.	____	____
e.	Positioned assistants on either side of bed and loosened drawsheet or used turning sheet.	____	____
f.	Used drawsheet to smoothly pull patient to carrier.	____	____

	YES	NO
16. For three-man lift to carrier:		
a. Positioned carrier at right angle to bed at foot.		
b. Locked wheels of bed and carrier.		
c. Raised bed to comfortable working height.		
d. Positioned one person at head to support head, neck, and chest; one to support mid-portion of body and one to support legs.		
e. Instructed patient to fold arms across chest.		
f. On signal, all three slid hands and forearms under assigned portion of body.		
g. On a second signal, all lifted patient and rolled him/her toward their chests.		
h. All nurses stepped backward and pivoted to face the carrier.		
i. All walked toward carrier.		
j. All rested patient on carrier and pulled arms from under patient.		
17. Raised siderails or fastened safety belt.		
18. Provided blanket and pillow for comfort.		
19. Repositioned any tubing or equipment.		
20. Unlocked wheels and transferred patient by pushing feet first.		

		YES	NO
21.	Evaluated according to established criteria.	____	____
22.	Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 13

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 13

Use a mechanical lift.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses which would contraindicate using the lift.	_____	_____
2. Checked for equipment such as IV tubing or catheters.	_____	_____
3. Checked manufacturer's specifications for allowable lifting weight for model used.	_____	_____
4. Familiarized self with operation of lift.	_____	_____
5. Enlisted aid of assistant to stabilize patient during transfer.	_____	_____
6. Obtained lift and chair.	_____	_____
7. Washed hands.	_____	_____
8. Explained procedure to patient.	_____	_____
9. Placed chair in position next to bed.	_____	_____

	YES	NO
10. Positioned patient on side and placed cloth sling on lift in position under back and buttocks, fanfolding portion next to patient.	____	____
11. Turned patient to other side and adjusted sling to correct position.	____	____
12. Turned patient to back.	____	____
13. Moved lift into place and attached hooks to sling.	____	____
14. Following manufacturer's directions, began lifting patient from bed, checking position in sling as he/she was moved upward.	____	____
15. Had an assistant guide patient's body as lift was moved, until patient was in position over chair.	____	____
16. Lowered patient into chair slowly.	____	____
17. Unfastened hooks from sling.	____	____
18. Repositioned patient as needed and adjusted any tubing or equipment.	____	____
19. Evaluated according to established criteria.	____	____
20. Documented appropriately.	____	____

EVALUATOR'S COMMENTS

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date) (Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 14

PROVIDE FOR PATIENT MOVEMENT

VIII

JOB SHEET 14

Apply safety devices.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Try to determine reason for patient's disorientation or agitation.	_____	_____
2. Noted medical or nursing diagnoses which would alter procedure.	_____	_____
3. Assessed body part where safety device was to be applied to determine condition of skin.	_____	_____
4. Determined range of motion present in joints to be restrained prior to application.	_____	_____
5. Chose appropriate safety device.	_____	_____
6. Followed agency policy in relation to obtaining doctor's order.	_____	_____
7. Explained need for safety device to patient and family.	_____	_____
8. Used a knot that could be easily untied.	_____	_____

	YES	NO
9. Checked patient frequently noting respirations and circulation.		
10. Unfastened patient at least every two hours.		
a. Inspected skin.		
b. Exercised all joints.		
c. Repositioned.		
d. Offered fluids.		
e. Assisted patient to bathroom or provided bedpan or urinal.		
11. Assisted with feeding at mealtimes.		
12. For limb restraint:		
a. Applied padding material if safety device was not padded.		
b. Wrapped device around limb securely, but not in a manner to restrict circulation.		
c. Attached ties to *frame* of bed or chair.		
13. For clove hitch limb restraint:		
a. Unrolled gauze or cloth.		
b. Made a figure eight at center of strip with tails going in opposite directions.		
c. Picked up loops from outside edges and passed limb through both loops.		

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		YES	NO
	d. Pulled tails until clove hitch fits securely around part without restricting circulation.		
	e. Fasten tails to *frame* of bed or chair.		
14.	For mitten:		
	a. Placed hand in mitten and secured at wrist.		
	b. Fastened ties to *frame* of bed or chair.		
15.	For belt:		
	a. Positioned belt on bed at patient's waist level.		
	b. Secured belt to frame of bed.		
	c. Placed patient on belt and fastened belt at patient's waist.		
	d. Checked to see that belt was secure, but did not interfere with respirations.		
16.	For vest or jacket:		
	a. Placed vest of jacket on patient by pulling over head or placing arms through armholes.		
	b. Fastened closings or ties securely, but not in a manner to interfere with respirations.		
	c. Fastened ties to *frame* of bed or wheelchair.		

	YES	NO
17. For crotch restraint:		
a. Turned patient to side and placed back portion against buttocks.	____	____
b. Turned to other side to position opposite side of device.	____	____
c. Brought front portion between legs.	____	____
d. Tied front and back together at sides.	____	____
e. Secured ties to *frame* of bed or chair.	____	____
18. Evaluated according to established criteria.	____	____
19. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
	4	3	2	1
Used equipment proficiently				
	4	3	2	1
Completed procedure correctly				

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date) (Evaluator's Signature)

(Evaluator's Position)

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WRITTEN TEST

PROVIDE FOR PATIENT MOVEMENT

VIII

NAME ______________________ SCORE ________

OBJECTIVE 1

Match terms associated with patient movement to their correct definitions. Write the correct letters in the blanks

Part 1

______1. Pneumonia caused by pooling of secretions in lungs due to lack of movement

______2. Collapse of portion of lung

______3. Loss of bone density

______4. Inflammation of a vein with blood clot formation

______5. A condition of the skin resulting from prolonged periods of pressure against an area

______6. Significant fall of blood pressure when assuming an upright position

______7. Wasting away of body part

______8. Formation of kidney stones

a. Anemia

b. Atelectasis

c. Atrophy

d. Decubitus ulcer

e. Hypostatic pneumonia

f. Orthostatic hypotension

g. Osteoporosis

h. Renal calculi

i. Thrombophlebitis

j. Venous stasis

Part 2

_______1. Inability to move

_______2. Manner of walking

_______3. Confined to bed

_______4. Fixed position of joint

_______5. A system of weights and pulleys used to maintain alignment of the body

_______6. A blood clot or other foreign object which has moved from its original site and can become lodged in a smaller vessel

_______7. To turn as a unit, keeping the spine in straight alignment

_______8. Relationship of body parts to one another.

a. Alignment
b. Anemia
c. Bedrest
d. Contracture
e. Embolus
f. Gait
g. Logroll
h. Paralysis
i. Traction
j. Venous stasis

Part 3

_______1. Difficult or infrequent defecation

_______2. Movement

_______3. Pooling of blood in the veins

_______4. Maintaining joint in natural position or position where it may be used

_______5. Decrease in number of red blood cells and hemoglobin

_______6. Amount of movement possible in a joint

a. Alignment
b. Anemia
c. Constipation
d. Footdrop
e. Mobility
f. Position of function
g. Safety device
h. Range of motion

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______7. Appliance used to limit movement for protection of patient or others

______8. Contracture of the foot and ankle in plantar flexion

i. Traction

j. Venous stasis

Part 4

______1. A blood clot

______2. Without movement

______3. To sit with feet hanging over side of bed

______4. Mass of stool retained in the colon

______5. Device used to restrict movement

______6. Loss of appetite

______7. Inflammation of a vein

______8. Combination of friction and pressure occurring when two layers of tissue slide in opposite directions

a. Anemia

b. Anorexia

c. Dangle

d. Fecal impaction

e. Immobility

f. Phlebitis

g. Restraint

h. Shearing force

i. Thrombus

j. Traction

k. Venous stasis

OBJECTIVE 2

Match terms associated with range of motion to their correct definitions. Write the correct letters in the blanks.

Part 1

______1. Bending the wrist or ankle toward the elbow or knee

______2. Bending at the wrist, placing the palm downward

______3. Straightening of a joint

a. Abduction

b. Adduction

c. Dorsal flexion

d. Extension

______4. Movement away from the midline of the body

______5. Turning of a joint

______6. Bending at the ankle, placing the sole downward

______7. Movement toward the midline of the body

______8. Bending a joint

e. Flexion

f. Palmar flexion

g. Plantar flexion

h. Proration

i. Rotation

j. Supination

Part 2

______1. Turning the palm downward

______2. Movement at the ankle with the sole of the foot turning outward

______3. Turning of a joint away from the body

______4. The capacity of the thumb to touch each finger

______5. Movement at the wrist toward the thumb or little finger; a type of abduction and adduction

______6. Movement at the ankle with the sole of the foot turning inward

______7. Turning the palm upward

______8. Turning of a joint toward the body

______9. Movement of a joint beyond the point of extension

a. Deviation

b. Eversion

c. External rotation

d. Extension

e. Hyperextension

f. Internal rotation

g. Inversion

h. Opposition

i. Pronation

j. Rotation

k. Supination

OBJECTIVE 3

Select benefits derived from exercise. Write an "X" in the blank before each correct answer.

______1. Decreases pressure against skin and nerves

______2. Stimulates the cardiovascular system

______3. Decreased metabolic rate

______4. Acts as a kind of pumping action for the veins which stimulates the return of deoxygenated blood to the heart for re-oxygenation

______5. Increases the respiratory effort causing the body to exchange oxygen and carbon dioxide faster

______6. Increased efficiency of digestion and elimination

______7. Causes body to store carbohydrates and fats

______8. Preserves bone mass

______9. Helps maintain joint function

_____10. Increases muscle mass and tone

_____11. Increases sense of well-being

_____12. Decreases all cell exchanges

OBJECTIVE 4

Choose the best word or phrase to complete statements about factors that restrict mobility. Write the correct letters in the blanks.

______1. In considering the mobility of hospitalized patients, we could say that most have ___.

a. voluntarily restricted movement
b. unavoidable restrictions to movement
c. some degree of immobility
d. no restriction in movement

______2. If a patient is on bed rest, ___.

a. he is physically incapable of getting up
b. he can get up to go to the bathroom
c. he has had surgery
d. the exact activity allowed should be clarified

______3. An example of a patient who is permanently immobile would be one who ___.

a. has a paralysis after a severed spinal cord
b. is in a long leg cast
c. has had abdominal surgery
d. refuses to move because of joint pain

______4. A patient who is on bed rest because of congestive heart failure demonstrates immobility due to ___.

a. complete immobility
b. therapeutic restrictions
c. voluntary restrictions
d. permanent immobility

OBJECTIVE 5 **List problems related to immobility.**

Cardiovascular system

1. ____

2. ____

3. ____

4. ____

5. ____

Respiratory system

6. ____

7. ____

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Gastrointestinal system

8. ______________________________

9. ______________________________

10. ______________________________

11. ______________________________

12. ______________________________

13. ______________________________

Urinary system

14. ______________________________

15. ______________________________

16. ______________________________

Psychological balance

17. ______________________________

18. ______________________________

19. ______________________________

20. ______________________________

21. ______________________________

22. ______________________________

Musculoskeletal system

23. ______________________________

24. ______________________________

25. ______________________________

Integumentary system

26. ______________________________

OBJECTIVE 6

Choose the best word or phrase to complete statements about nursing interventions that prevent or reduce the effects of immobility. Write the correct letters in the blanks.

______ 1. The nurse who wishes to lessen the boredom which can accompany immobility would use techniques known as ___.

a. positioning
b. environmental stimulation
c. range of motion exercises
d. patient and family teaching

______ 2. Muscle atrophy, contracture formation, and venous stasis can be best prevented by ___.

a. environmental stimulation
b. therapeutic devices
c. patient and family teaching
d. range of motion exercises

______ 3. When family members object that the patient is being disturbed unnecessarily by turning, the nurse could best handle the situation by ___.

a. explaining the need for such measures
b. refraining from turning the patient more than once a shift
c. reporting the incident to the nursing supervisor
d. asking the visitors to leave

______ 4. Position changes ___.

a. should take place every four hours
b. should include maintaining correct alignment
c. cause unnecessary pain
d. cause pooling of body fluids

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OBJECTIVE 7

Choose the best word or phrase to complete statements about therapeutic devices used to combat the effects of immobility. Write the correct letters in the blanks.

Mr. Wilson is a practical nurse caring for Mr. Short, an 85-year-old man who has had a repair of a broken hip. Mr. Wilson is trying to choose the correct therapeutic devices to prevent problems associated with immobility.

______1. Since Mr. Short spends a lot of time in bed, Mr. Wilson is trying to prevent skin problems by supplying ____.

a. a trochanter roll
b. an egg crate mattress
c. bed boards
d. a bed cradle

______2. In order to prevent venous stasis, Mr. Short has ____.

a. abduction wedges
b. a trapeze bar
c. elbow and heel protectors
d. anti-embolism stockings

______3. Mr. Short can aid in repositioning himself because he has a ____.

a. bed cradle
b. turning sheet
c. hand roll
d. trapeze bar

______4. Correct alignment of the surgical repair is maintained by ____.

a. a sheepskin pad
b. elbow and heel protectors
c. an abduction wedge
d. a flotation mattress

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______5. If Mr. Short developed outward rotation of the hip, Mr. Wilson could use ___.

a. a trochanter roll
b. an alternating air pressure mattress
c. a turning sheet
d. an athrombic pump

______6. A footboard is helpful in preventing ___.

a. venous stasis
b. plantar flexion
c. decubitus ulcers
d. osteoporosis

______7. A device that performs the same function as antiembolism stockings is ___.

a. a turning sheet
b. a trochanter roll
c. an alternating air pressure mattress
d. an athrombic pump

______8. Flexion contracture of the fingers can be prevented by a ___.

a. splint
b. hand roll
c. finger brace
d. trochanter roll

______9. Elbow and heel protectors prevent ___.

a. dorsal flexion
b. pronation
c. skin breakdown
d. thrombus

______10. A bridging technique is helpful in ___.

a. moving patients
b. keeping covers off patients
c. preventing adduction of the hip
d. removing pressure from the heel and ankle

OBJECTIVE 8

Choose the best word or phrase to complete statements about the risk factors in skin breakdown. Write the correct letters in the blanks.

Mrs. Small is a 78-year-old woman who has suffered a stroke. She has difficulty maintaining body alignment and she weighs 90 pounds. Her nurses are concerned about decubitus ulcer formation.

_______1. The nurses know that the greatest factor contributing to decubitus ulcer formation is ___.

a. age
b. pressure
c. obesity
d. body heat

_______2. The most important fact about Mrs. Small as her nurses consider decubitus ulcer formation is that she ___.

a. eats a variety of foods
b. sleeps poorly
c. often slides down in bed when in the Fowler's position
d. has very few visitors

_______3. The laboratory finding that might make a difference in her ability to avoid a decubitus ulcer shows that her ___.

a. urine shows a trace of protein
b. potassium level is slightly decreased
c. cholesterol level is elevated
d. hemoglobin is low

_______4. Shearing force can be described as ___.

a. a result of poor nutrition
b. an irritating substance on the skin
c. a combination of friction and pressure
d. an increase in body heat resulting in perspiration

______5. The mental status of a patient ___.

a. has no effect on skin condition
b. is affected by the presence of a decubitus ulcer
c. may make a patient less cooperative in preventing skin breakdown
d. is probably the greatest factor in decubitus ulcer formation

OBJECTIVE 9

Select methods to prevent decubitus ulcers. Write the correct letters in the blanks. Consider the same Mrs. Small as in Objective 8.

As Mrs. Small's nurses care for her, they try to use appropriate measures to prevent decubitus ulcers.

______1. Which therapeutic device might help Mrs. Small?

a. Heel protectors
b. A trapeze bar
c. A trochanter roll
d. A footboard

______2. The nurses may prevent the harmful effects of shearing force by ___.

a. turning the patient infrequently
b. applying lotion to the skin
c. using a turning sheet
d. elevating the legs

______3. When Mrs. Small is incontinent, the nurses should ___.

a. use water-proof materials
b. wash, rinse and dry the area thoroughly
c. apply a diaper
d. scold her

______4. A good position for preventing bed sores is ___.

a. supine
b. prone
c. Sim's
d. Fowler's

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______5. Therapeutic devices and techniques that can prevent pressure sores include bridging technique, heel protectors, special mattresses, and ___.

a. splints
b. hand rolls
c. bed cradles
d. pillows

______6. The BEST treatment is ___.

a. hydrotherapy
b. turning every hour
c. prevention
d. frequent massage

______7. Reddened areas which do not return to normal color when pressure is removed should ___.

a. be massaged
b. not be massaged
c. be treated with topical medications
d. be treated with heat applications

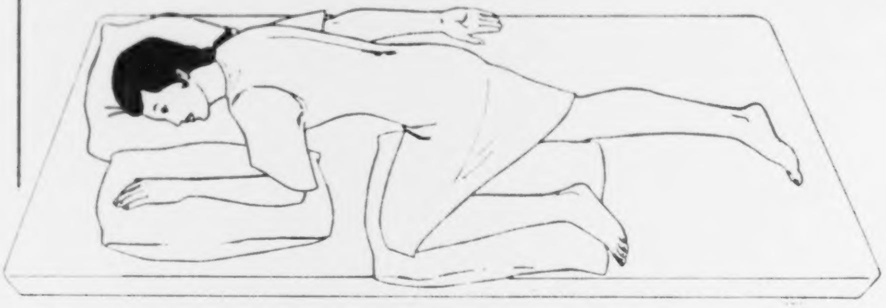
______8. Patients at risk for decubitus ulcers might benefit from ___.

a. between-meal snacks
b. additional reading material
c. a diet high in calcium
d. ice packs

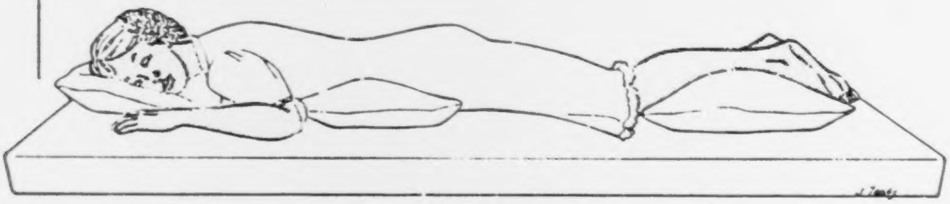
OBJECTIVE 10

Label common body positions. Write the correct letters in the blanks.

a. Fowler's
b. Lateral
c. Sim's
d. Supine
e. Prone



1. ____________________



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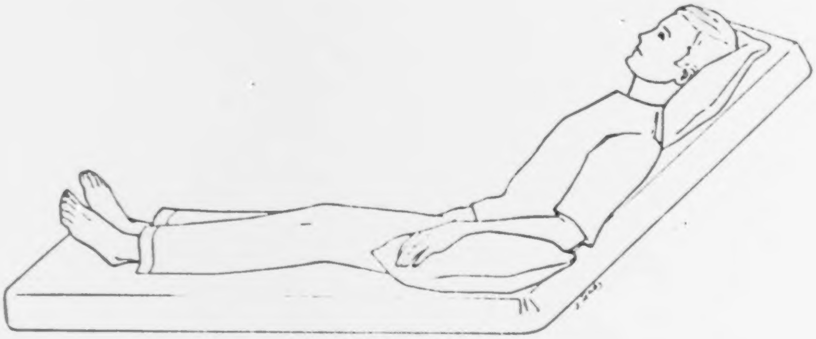

3. ____________________

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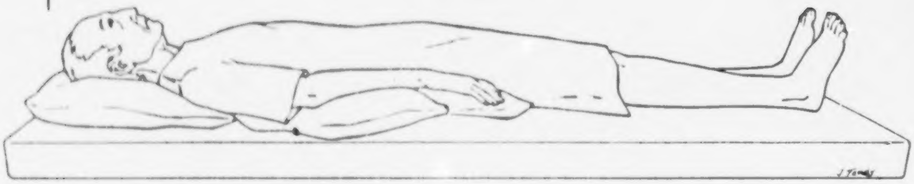

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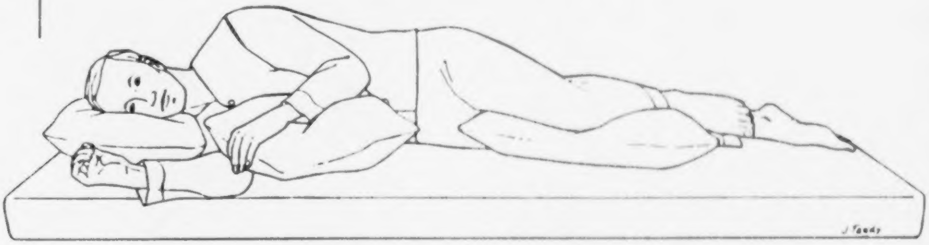

5. ____________________

OBJECTIVE 11

Select from a list patients at risk for falls. Write an "X" in the blank before patients likely to fall.

_______1. A 50-year-old woman who has had an abdominal hysterectomy

_______2. A man recovering from a heart attack

_______3. A 40-year-old man who is legally blind

_______4. An 80-year-old woman with pneumonia

_______5. A 60-year-old man with high blood pressure

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______6. A patient who does not speak English

______7. A teenager with epilepsy

______8. A child with chickenpox

______9. A 25-year-old with postural hypotension

______10. An 18-year-old hospitalized for shoulder surgery

OBJECTIVE 12

Select from a list interventions for preventing falls. Write an "X" in the blank before each effective intervention.

______1. Placing at risk patients near the nurses' station

______2. Suggesting that patients wear their hearing aids

______3. Providing pain medication

______4. Keeping the bed at a comfortable working level for the nurse

______5. Providing footwear with non-skid soles

______6. Providing a night light

______7. Insisting that patients remain in bed

______8. Inspecting wheelchairs, walkers, and canes for any defects

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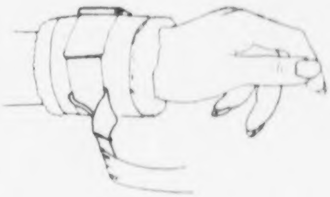
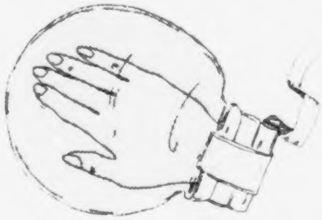
OBJECTIVE 13

Identify safety devices. Write the correct letters in the blanks.

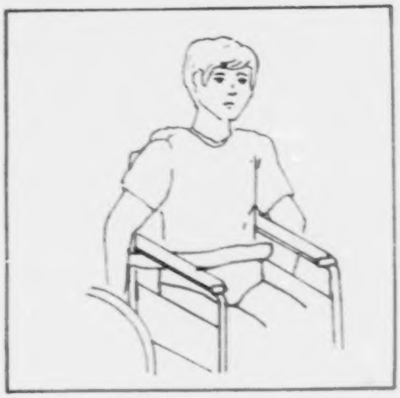
a. Crotch
b. Limb
c. Mitten
d. Vest
e. Waist
f. Back
g. Limitation
h. Neck



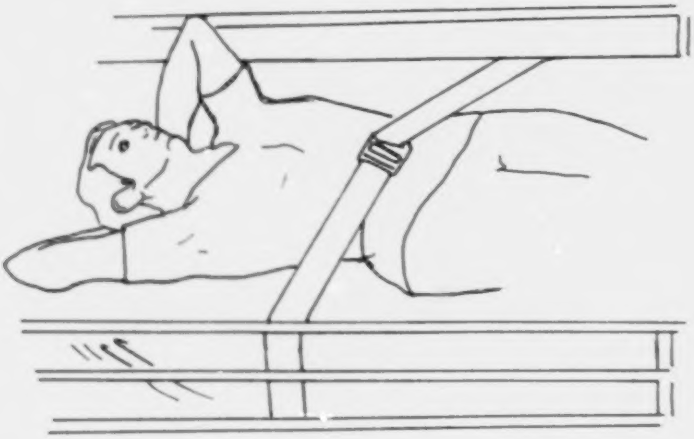
_______1.



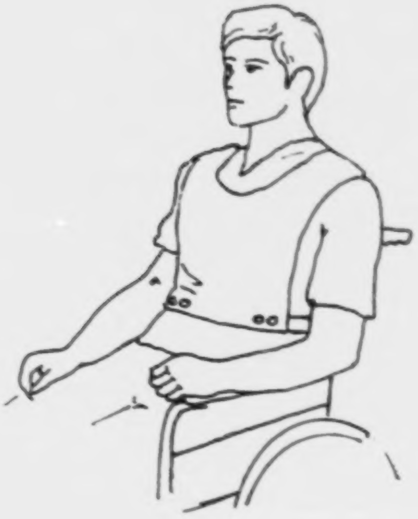
_______2.



______3.



______4.



______5.

OBJECTIVE 14

Choose the best word or phrase to complete statements about the nursing process when safety devices are indicated. Write the correct letters in the blanks.

______1. In considering safety devices, the major concern should be ___.

a. the convenience of the nurse
b. the protection of the patient
c. limiting patient movement
d. pleasing family members

______2. When assessing the need for a safety device, the nurse should ___.

a. consider the need for more movement
b. try to determine why the patient is confused
c. both of these
d. none of these

______3. An agitated patient may be calmed by ___.

a. moving to an area of greater activity
b. playing marching music
c. offering warm fluids
d. isolating him

______4. When safety devices are applied, it is best to ___.

a. position the patient on his back
b. loosen the device every two hours
c. tie the device to the siderails
d. withhold fluids

______5. Documentation of safety devices ___.

a. only includes times the device is applied
b. includes assessment of the skin
c. is the RN's responsibility
d. is the doctor's responsibility

______6. In assessing patients before applying safety devices, the nurse should consider the possibility of confusion due to ___.

a. infection
b. electrolyte imbalance
c. neither of these
d. both of these

______7. In choosing safety devices, the nurse should choose ___.

a. at least two
b. the one which covers the most area
c. the least restrictive one
d. the one which will restrain the patient the most

______8. When safety devices are applied ___.

a. they should be left in place for eight hours
b. the patient should understand she had better behave herself
c. food and fluid should be withheld
d. two fingers should fit under the device

______9. The use of safety devices is ___.

a. limited by Federal guidelines
b. greater in other countries than in the United States
c. applied to over 45% of nursing home resident
d. documented only when they are first applied

NOTICE The following assignment sheet and job sheets are not part of the Written Test. If these activities have not been completed, check with your instructor.

OBJECTIVE 15 **Assess mobility.** SCORE ______

OBJECTIVE 16 **Demonstrate the ability to:**

a. **Perform passive range of motion exercises.** RATING ______

b. **Instruct patient in active range of motion exercises.** RATING ______

c. **Apply anti-embolism stockings.** RATING ______

d. **Position the patient in the supine, prone, lateral, Fowler's and Sim's positions.** RATING ______

e. **Use a turning sheet.** RATING ______

f. **Logroll a patient.** RATING ______

g. **Assist a patient to dangle.** RATING ______

h. **Transfer a patient to a chair or wheel chair.** RATING ______

i. **Assist a patient to ambulate.** RATING ______

j. **Assist a patient to ambulate with assistance devices.** RATING ______

k. **Assist a falling patient.** RATING ______

l. **Transfer a patient to a carrier.** RATING ______

m. **Use a mechanical lift.** RATING ______

n. **Apply safety devices.** RATING ______

WRITTEN TEST ANSWERS

PROVIDE FOR PATIENT MOVEMENT VIII

OBJECTIVE 1

Part 1

1. e
2. b
3. g
4. i
5. d
6. f
7. c
8. h

Part 2

1. h
2. f
3. c
4. d
5. i
6. e
7. g
8. a

Part 3

1. c
2. e
3. j
4. f
5. b
6. h
7. g
8. d

Part 4

1. i
2. e
3. c
4. d
5. g
6. b
7. f
8. h

OBJECTIVE 2

Part 1

1. c
2. f
3. d
4. a
5. i
6. g
7. b
8. e

Part 2

1. i
2. b
3. c
4. h
5. a
6. g
7. k
8. f
9. e

OBJECTIVE 3

1, 2, 4, 5, 6, 8, 9, 10, 11

OBJECTIVE 4

1. c
2. d
3. a
4. b

OBJECTIVE 5

Answers should include:

- Orthostatic or postural hypotension
- Phlebitis
- Thrombus formation
- Thrombophlebitis
- Embolus
- Hypostatic pneumonia
- Atelectasis
- Anorexia
- Constipation
- Fecal impaction
- Weight loss
- Obesity
- Changes in blood chemistry
- Osteoporosis
- Muscle atrophy
- Contracture formation
- Urinary tract infection
- Renal calculi
- Incontinence
- Sleep pattern disturbances including insomnia
- Sensory deprivation
- Depression
- Anger
- Self-centered outlook
- Decreased coping and problem-solving abilities

OBJECTIVE 6

1. b
2. d
3. a
4. b

OBJECTIVE 7

1. b
2. d
3. d
4. c
5. a
6. b
7. d
8. b
9. c
10. d

OBJECTIVE 8

1. b
2. c
3. d
4. c
5. c

OBJECTIVE 9

1. a
2. c
3. b
4. b
5. d
6. c
7. b
8. a

OBJECTIVE 10

1. c
2. e
3. a
4. d
5. b

OBJECTIVE 11

3, 4, 6, 7, 9

OBJECTIVE 12

1, 2, 5, 6, 8

OBJECTIVE 13

1. b
2. c
3. a
4. e
5. d

OBJECTIVE 14

1. b
2. c
3. c
4. b
5. b
6. d
7. c
8. d
9. a

OBJECTIVE 15	Refer to answers for Assignment Sheet 1.
OBJECTIVE 16	Refer to practical test ratings for Job Sheets 1-14.

OBJECTIVE SHEET

PROVIDE URINARY CARE

IX

INTRODUCTION

The urinary system plays an important role in fluid balance. Since water is our second most pressing physiological need, this becomes a very serious matter. It is also important to remember that urinary tract infections are the leading type of nosocomial infection. These two facts together make it extremely important that the nurse develop skill in providing for and promoting urinary elimination. These skills include accurate assessment.

UNIT OBJECTIVE

After completing this unit, the student should be able to assess the urinary system and fluid balance, select nursing measures to assure adequate elimination, use nursing interventions to assist the patient with urinary elimination and collect urine specimens. The student will demonstrate this knowledge by completing assignment sheets, job sheets, practical tests and the written test with a minimum of 85 percent accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will:

1. Match terms associated with assessment of the urinary system and fluid balance to their definitions.
2. Match terms associated with nursing interventions related to the urinary system to their definitions.
3. List the four common urine assessments.
4. Choose the correct word or phrase to complete statements about normal and abnormal urine assessment data.
5. Select from a list true statements about urinalysis reports.
6. Match characteristics of urinary elimination patterns with their descriptions.
7. List factors that may inhibit a patient's ability to void.
8. Choose the correct word or phrase to complete statements about nursing interventions which promote urinary elimination.
9. Match types of incontinence with their descriptions.
10. List causes of functional incontinence.

11. Choose the correct word or phrase to complete statements about common nursing interventions for the incontinent patient.

12. Distinguish among assessment data that may indicate fluid deficit or fluid overload.

13. Describe normal intake and output measurements.

14. List common intake and output sources.

15. Choose the correct word or phrase to complete statements about recording intake and output.

16. Identify containers used to measure intake and output.

17. Convert common measurements used in calculating intake and output.

18. State the goals of nursing interventions for patients with catheters.

19. Choose the correct word or phrase to complete statements about catheter tubes, drainage bags and collection ports, and patient care.

20. Choose the correct word or phrase to complete statements about nursing care of the patient with a catheter.

21. Choose the correct word or phrase to complete statements about guidelines for collecting urine specimens.

22. Select from a list ways to adapt the collection of urine specimens to meet the needs of various age groups.

23. Assess the urinary system and fluid balance. (Assignment Sheet 1)

24. Calculate intake and output. (Assignment Sheet 2)

25. Demonstrate the ability to:

    a. Assist a patient with a bedpan or fracture pan. (Job Sheet 1)

b. Assist patient to the bathroom or bedside commode. (Job Sheet 2)

c. Assist patient with a urinal. (Job Sheet 3)

d. Empty a urinary drainage bag. (Job Sheet 4)

e. Discontinue an indwelling catheter. (Job Sheet 5)

f. Collect a clean catch/midstream urine specimen. (Job Sheet 6)

g. Collect a 24 hour/cumulative specimen. (Job Sheet 7)

h. Perform urine testing using reagent paper. (Job Sheet 8)

PROVIDE URINARY CARE

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- Decorate a bulletin board with information pertaining to this unit.
- Devise games and/or crossword puzzles to reinforce terms or groupings.
- **HOSA** Integration
    - Assist students in conducting a chapter service project on the information in this unit.
    - Develop objectives for a service project and identify a theme.
    - Create a poster according to Extemporaneous Health Display rules and display it in highly visible areas.
    - Plan a community or school health project.

DELIVERY

Objectives 1 and 2

- Discuss terms associated with assessment of the urinary system and fluid balance.
- Have a spelling bee using words.

- Discuss terms associated with nursing interventions related to the urinary system.

Objective 3

- Discuss pertinent observations of urine.

Objective 4

- Have students provide samples and compare, contrast, and discuss amount, color, clarity, and odor.

Objective 5

- If a urinometer or refractometer is available, let students practice obtaining specific gravity of different liquids.

- Look at urinalysis results and evaluate them.

Objective 6

- Discuss patterns of urinary elimination.

Objective 7

- Discuss factors which inhibit urinary elimination.

Objective 8

- Discuss nursing interventions to aid urinary elimination.

- Brainstorm ways to increase a patient's fluid intake to aid in voiding.

Objective 9

- Discuss types of urinary incontinence.

Objective 10

- Discuss causes of functional incontinence.

Objective 11

- Discuss nursing interventions for the incontinent patient.

Objective 12

- Discuss assessment findings which would suggest fluid deficit or fluid overload.
- Find textbook pictures of symptoms such as periorbital edema, pitting edema, sunken fontanel, etc.

  Show video, *Fluid Balance: Assessment, Maintenance, Intervention* or *Fluid Balance.*

Objective 13

- Discuss normal intake and output measurements.

Objective 14

- Discuss common intake and output sources.
- Locate pictures of patients with tube feedings, wound drainage devices, etc.

Objective 15

- Discuss nursing intervention necessary when intake and output records are kept.
- Obtain bedside records from clinical areas for students to see.
- Show various size containers for oral fluids.

Objective 16

- Display calibrated container, specimen pan, drinking glass with calibrations, etc.

Objective 17

- Discuss common measurements used in calculating intake and output.

Objective 18

- Discuss goals of nursing interventions for patients with catheters.

Objective 19

- Demonstrate filling the balloon in an indwelling catheter.
- Demonstrate the drainage bag and collection port.

Objective 20

- Discuss nursing interventions necessary when an indwelling catheter is used.

Objective 21

- Discuss guidelines for collecting urine specimens.
- Show students various containers for collecting specimens.
- Show students urine strainer.
- Show video *Urinary Care*.

Objective 22

- Discuss ways to adapt the collection of urine specimens to suit various stages in the lifespan.
- Show students a pediatric urine collecting device.

APPLICATION

Objective 23

- Discuss Assignment Sheet 1.
- Have students complete assignment sheet.

Objective 24

- Discuss Assignment Sheet 2.
- Have students complete assignment sheet.
- Have students practice obtaining intake and output using HOSA nursing assistant competitive event guidelines.

Objective 25

- Discuss Job Sheet 1.
- Have students practice placing a patient on a bedpan or fracture pan using Job Sheet 1.
- Discuss Job Sheet 2.
- Have students practice removing bedpan or receptacle from bedside commode if one is available using Job sheet 2.
- Discuss Job Sheet 3.
- Have students use Job Sheet 3 to practice assisting patients with a urinal.
- Discuss Job Sheet 4.
- Have students practice emptying a urinary drainage bag using Job Sheet 4.
- Discuss Job Sheet 5.
- Discuss Job Sheet 6.
- Have a clean catch kit available for students to see and use to practice with Job Sheet 6.
- Discuss collection of a 24 hour/cumulative specimen
- Have students practice with Job Sheet 7.
- Discuss Job Sheet 8.
- Have students practice urine testing with reagent paper using Job Sheet 8.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.

- Counsel students individually on pretest results and study requirements.

- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheets to complete the practical test.

- Describe the rating scale used on the practical test.

- Give practical test.

- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.

- Give written test.

- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.

- Complete appropriate section of competency profiles.

- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Fluid Balance: Assessment, Maintenance, Intervention.* Available from: Medcom/Trainex, Box 3225, Garden Grove, CA 92642. Phone: 800-877-1443.

- *Fluid Balance*. Available from: Medcom/Trainex, Box 3225, Garden Grove, CA 92642. Phone: 800-877-1443.

- *Urinary Care*. Available from: Medcom/Trainex, Box 3225, Garden Grove, CA 92642. Phone: 800-877-1443.

UNIT REFERENCES

- Brady, Suzette. "Getting the Kinks Out of a Bladder Drainage System", *RN*, February, 1988, p39-40.
- Frank, Arline and Susan M. Murray. "A No-Guess Guide for Urinary Color Assessment", *RN*, June, 1988, p46-51.
- Hogan, Jean and Sheila A. Sorrentino. *Textbook for Long-Term Care Assistants*. The C.V. Mosby Company, St. Louis, 1988.
- *Implementing Urologic Procedures*. Horsham, Pennsylvania, Intermed Communications, Inc., 1981.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures* (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- *Monitoring Fluids and Electrolytes Precisely*. Intermed Communications, Inc., Horsham, Pennsylvania, 1981.
- Newman, Diane Daschak and Diane A. Smith. "Incontinence: The Problem Patients Won't Talk About", *RN*, March, 1989, p42-45.
- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques*. The C.V. Mosby Company, St. Louis, Missouri, 1986.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C.V. Mosby Company, St. Louis, Missouri, 1987.
- Pritchard, Vickie. "Geriatric Infections: The Urinary Tract", *RN*, May, 1988, p36-38.
- *Procedures*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1983.
- Sloan, Jamee Reid, *Practical Nursing-Volume 1*. Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.

- Timby, Barbara K. *Clinical Nursing Procedures*. J.B. Lippincott Company, Philadelphia, Pennsylvania, 1989.

- Wells, Thelma. "Conquering Incontinence", *Geriatric Nursing*, May/June, 1990, p133-135.

- Will, Connie A. and Judith B. Eighmy. *Being a Long-Term Care Nursing Assistant* (2nd ed.). Prentice Hall, Englewood Cliffs, New Jersey, 1988.

INFORMATION SHEET — PROVIDE URINARY CARE — IX

OBJECTIVE 1

Match terms associated with assessment of the urinary system and fluid balance to their definitions.

- **Acetonuria** — Presence of acetone, a waste product of fat metabolism, in urine
- **Albuminuria** — Presence of protein in urine
- **Anasarca** — Generalized edema
- **Anuria** — Absence of urinary output
- **Ascites** — Accumulation of fluid in the peritoneal cavity
- **Dehydration** — Loss of fluid from body tissue
- **Diaphoresis** — Profuse perspiration
- **Distention** — Condition of being inflated or swollen
- **Diuretic** — Medication to produce excretion of fluid
- **Dysuria** — Painful or difficult urination
- **Edema** — Accumulation of fluid within body tissue
- **Flank** — Lateral portion of body between ribs and hip
- **Glucosuria** — Presence of sugar in urine
- **Hematuria** — Presence of blood in urine
- **Ketonuria** — Presence of ketone, a waste product of fat metabolism, in urine
- **Micturition** — Act of excreting urine from the body
- **Oliguria** — Scanty urine output
- **Polyuria** — Excessive urine output
- **Proteinuria** — Presence of protein in urine

- **Pyuria** — Presence of pus in urine
- **Refractometer** — Instrument used to determine specific gravity
- **Renal** — Pertaining to the kidney
- **Residual urine** — Urine left in the bladder after voiding
- **Specific gravity** — Weight of substance compared with water
- **Turgor** — Elasticity of skin related to fluid content
- **Urgency** — Feeling that bladder must be emptied immediately
- **Urinalysis** — Laboratory examination of urine
- **Urination** — Act of excreting urine
- **UTI** — Abbreviation for urinary tract infection
- **Void** — Act of excreting urine

OBJECTIVE 2

Match terms associated with nursing interventions related to the urinary system to their definitions.

- **Bedside commode** — A portable chair-like receptacle used for elimination
- **Catheter** — A tube inserted through the urethra into the bladder for urine drainage
- **Condom catheter** — An **external catheter**; one that is attached to the penis rather than inserted through the urethra
- **Cubic centimeter (cc)** — A metric unit of volume measurement; equal to 1/1000 of a liter
- **Culture** — Technique of determining presence of pathogenic organisms
- **Emesis** — Vomiting

- **Foley catheter** — A catheter that remains in place in the bladder by inflation of a balloon; also called an indwelling catheter and a retention catheter
- **Intake and Output (I & O)** — Measurement of liquids entering the body and leaving the body
- **Kegel exercises** — Exercises to strengthen muscles of the pelvic floor
- **Liter (L)** — A metric unit of volume measurement, roughly equivalent to a quart
- **Lumen** — Channel or opening
- **Milliliter (ml)** — A metric unit of volume measurement; 1/1000 of a liter
- **Parenteral fluids** — Administration of fluids by a route other than the digestive system

  EXAMPLE: IV fluids
- **Reflux** — Back flow of urine into kidneys
- **Second voided specimen** — Technique of having patient void twice to determine current chemical status of body; also called double-voided specimen
- **Sensitivity** — Laboratory test to determine which antibiotic agent will be effective against a specific pathogen
- **Straight catheter** — Catheter that does not need to stay in place; used for obtaining urine from the bladder
- **Supra-pubic catheter** — Catheter placed surgically through the abdominal wall
- **Three-way Foley catheter** — An indwelling catheter with three lumen suitable for continuous bladder irrigations
- **Urine meter** — Device for frequent measurement of urine through an indwelling catheter

OBJECTIVE 3

List the four common urine assessments.

Each time a patient voids, the urine should be inspected to detect any developing problems. Urine is a product of the kidneys which serve as filters for the body. Blood circulating through the kidneys is cleared of waste products and useful substances are retained by the body. Thus, urine is a waste product and its contents can give us information about the function of the body. The four common urine assessments are

- Amount
- Color
- Clarity
- Odor

OBJECTIVE 4

Choose the correct word or phrase to complete statements about normal and abnormal urine assessment data.

AMOUNT

Adults should secrete at least 30 cc of urine an hour. 60-120 cc is within normal range. Most people feel the urge to void when about 200 cc of urine accumulates in the bladder. Normal urine output for a 24 hour period is 1000-1500 cc. An increase or decrease of fluid intake can-alter the amounts. Disease conditions also cause changes.

COLOR

Normal urine should be yellow in color. The term "straw" is frequently used to describe a normal color. Pale yellow urine indicates low concentration of substances dissolved in the liquid. This can occur with some disease conditions, when a large volume of liquid is consumed, or when the patient takes diuretics. Dark yellow urine indicates a high concentration of substances dissolved in the liquid. This can occur with low fluid intake or dehydration.

Other colors may also be noted. Shades of orange may indicate the presence of blood or may occur with medication. Phenazopyridine hydrochloride (Pyridium) which is used to treat urinary tract infections is an example of such a medication. Red shades indicate the presence of blood, with darker shades indicating an increased amount of blood. The term smoky is often used for red-tinged, dirty appearing urine. This is often associated with bleeding caused by kidney stones. It should be kept in mind that with females, menstrual blood may be present in voided urine.

A dark, brownish color often termed tea-colored, indicates liver or gall-bladder disease. A greenish-blue color indicates the presence of methylene blue dye which is used in diagnostic tests to visualize the structures of the urinary system. A green color may also indicate an infection caused by the pseudomonas organism.

CLARITY

Urine should be clear or transparent without any visible solid particles. The presence of cloudy urine usually indicates infection. Blood clots, pus, or shreds of mucous are all abnormal conditions.

ODOR

Urine has a characteristic odor. Some foods or medications, such as vitamins, may change the odor. Foul or strong-smelling odor is an indication that something is wrong.

The combination of data about the amount, color, clarity and odor of urine is often extremely important in diagnosing conditions. Any abnormalities should be investigated further, keeping in mind any changes in intake of foods, fluids, or medications.

OBJECTIVE 5 **Select from a list true statements about urinalysis reports.**

The nurse should be familiar with the normal laboratory findings of a urinalysis. The nurse is frequently the first to see such findings and should be able to interpret them sufficiently to determine whether further action, such as calling a doctor, is required. A urinalysis report is a combination of observation, chemical testing, and microscopic examination. Various laboratories may assign slightly different numerical values as normals, but the range will be similar.

A normal report might look something like this:

Color	Straw
Clarity (or character)	Clear
Odor	Characteristic
Specific gravity	1.005 - 1.025
pH	4.6 - 8
Protein	Negative
Glucose	Negative
Ketones	Negative
Red blood cells	Negative
White blood cells	Negative
Epithelial cells	Few
Hyaline casts	Few

The specific gravity refers to the amount of substances dissolved in the urine in relation to liquids. Thus, more concentrated urine will have a higher specific gravity and less concentrated urine will have a lower specific gravity.

Most urine will have a pH of about six, which is slightly acidic. An increased intake of fruits, vegetables and dairy products will increase the alkalinity of urine, while cranberry juice and meats will increase the acidity of urine.

Proteinuria (or albuminuria), glucosuria (or glycosuria), ketonuria (or acetonuria), and hematuria are all abnormal findings discovered with urinalysis. There may or may not be changes in appearance or odor. The presence of white blood cells and a cloudy appearance will usually accompany pyuria.

OBJECTIVE 6

Match characteristics of urinary elimination patterns with their descriptions.

Patterns of voiding can give useful information about an individual's physical condition. Normally, adults void on awakening in the morning, before going to bed at night, and around mealtimes, although each individual will follow his own pattern. In assessing patterns of voiding, the nurse must first determine what is normal for that person.

- Most people can sleep through the night without awakening to void. When an individual does awaken at night to void, it is called **nocturia**.

- When a large quantity of urine is voided it is called **polyuria**. **Diuresis** also refers to a large urine output. While polyuria refers to a large quantity of urine, **frequency** refers to voiding at short intervals. Sometimes the individual experiencing frequency will void often but with only small amounts.

- A very small or scanty urine output is called **oliguria**. Absence of urine output is called **anuria**. **Retention** refers to an accumulation of urine in the bladder which for some reason, the individual cannot expel. **Suppression**, on the other hand, means that no urine is produced by the kidneys.

  Renal failure or **renal shutdown** describes the inability of the kidneys to function, resulting in suppression.

- **Urgency** means that the individual becomes suddenly and acutely aware of the need to empty his bladder. **Dysuria** is painful or difficult urination. The two patterns may be seen together in urinary tract infections (UTI).

- Sometimes it is necessary to check for **residual urine**, meaning the amount of urine left in the bladder after voiding. This should be a very small amount. If there is reason to believe that the bladder is not being completely emptied, the patient must be catheterized immediately after voiding to determine the residual urine.

- **Incontinence** refers to the inability to retain urine in the bladder. There are various reasons for incontinence and different patterns shown depending upon the cause of the incontinence. (See Objectives 7 and 9)

OBJECTIVE 7

List factors that may inhibit a patient's ability to void.

Attention to patterns of voiding can help the nurse recognize the times when a patient may have difficulty voiding due to physiological or psychological factors. They include:

- A stricture of the urethra
- The effects of anesthetic after surgery
- Swelling after childbirth or surgical procedures involving the genitourinary structures

- Medications such as atropine, antihistamines and some anti-hypertensives
- The supine position
- Lack of privacy

OBJECTIVE 8

Choose the correct word or phrase to complete statements about nursing interventions which promote urinary elimination.

The nurse must be able to perform nursing interventions which may stimulate voiding for the patient having difficulty. The nurse can expect to use these techniques for the post-partum patient, for the post-operative patient, and for the patient who has had a Foley catheter removed. Most efforts are directed at helping the patient to relax so the muscles involved will also relax and permit urination.

- **Providing privacy and time** — Many patients have difficulty if they do not feel they have complete privacy. Along with privacy, the patient should not feel rushed. Allow sufficient time for voiding to take place.
- **Helping the patient assume a natural position** — The female should always be raised to a sitting position on the bedpan unless her condition contraindicates it. If the female cannot be helped to the toilet stool in the bathroom, a bedside commode may be useful. If a commode is not available, the bedpan could be placed on a chair at the bedside and the patient assisted to the chair. The male can frequently be helped to void if assisted to a standing position, unless his condition will not permit it.
- **Warming the bedpan or urinal** — Contact with a cold surface can inhibit voiding. Filling the bedpan or urinal with very warm water and emptying before the patient attempts to use them may aid relaxation.
- **Providing the sound of running water** — This sound will frequently stimulate voiding. Turn on water where the patient will hear it and allow time for the patient to void. Placing the patient's hand in warm water may also help.

- **Pouring warm water over the external genitalia** — Measure the amount first and then subtract this amount from the total in the receptacle to determine the amount voided. An alternative approach would be placing the patient in a Sitz bath or bathtub with warm water and encouraging the patient to void. Of course, the amount voided could not be definitely determined using this method.
- **Encouraging females to sit backward on the toilet seat** — Strange as it may seem, straddling the toilet seat and sitting "backward" seems to help in the relaxation process.
- **Encourage the patient to drink** — Encourage the patient to drink generous amounts of fluid if there is no fluid restriction.

OBJECTIVE 9

Match types of incontinence with their descriptions.

Nurses frequently see patients who are incontinent of urine. It is a condition that may embarrass the patient and complicate care. The nurse should know that there are several reasons for incontinence and that some can be remedied.

The most common type of incontinence in the female is **stress incontinence**. A sudden increase in intra-abdominal pressure, such as that which occurs with sneezing, coughing or laughing, can push urine out of the bladder. It is most often blamed on weakened pelvic muscles following pregnancy.

Urge incontinence occurs when there is the sensation of a full bladder, but leaking occurs before the bathroom is reached. It is common with older adults. Contractions of the bladder occur when they should not and could be caused by weak pelvic muscles, infection, tumor, kidney stone, or some neurological diseases.

Overflow incontinence is a dribble of urine that occurs when the bladder isn't emptied completely. Urethral stricture or neurological problems could be the cause.

These three types of incontinence have some physiological cause related to the urinary system and its functioning. **Functional incontinence** has a cause primarily outside the urinary system, such as restricted mobility or lack of mental capacity.

OBJECTIVE 10

List causes of functional incontinence.

- **Delirium or mental confusion** — May accompany an illness or surgical procedure; can be brief or longer lasting, as in Alzheimer's disease.
- **Dehydration** — Causes drying and irritation of the mucous lining of the urinary meatus
- **Restricted mobility** — Makes it difficult to reach the bathroom
- **Inflammation** — Especially associated with decreased estrogen levels after menopause
- **Infection of the urinary tract**
- **Fecal impaction** — Can obstruct the flow of urine or increase intra-abdominal pressure
- **Medications** — Diuretics, sleeping medications, antispasmodics, and some drugs used for treating hypertension
- **Polyuria** — Caused by diuretic therapy or disease process

OBJECTIVE 11

Choose the correct word or phrase to complete statements about common nursing interventions for the incontinent patient.

Nursing intervention may aid some patients in conquering incontinence and it will prevent complications in those who cannot be helped.

Many types of incontinence can be treated. Surgical procedures can correct some of the problems causing the nonfunctional types. Drugs may be used to treat urge incontinence. Exercises, bladder retraining and control of a disease process can treat other types. Thus it is important to determine the reason for the problem.

When exercises are used to treat incontinence, the nurse may have the responsibility to teach the patient Kegel exercises, also called pelvic floor exercises. The patient is instructed to contract perineal muscles as if trying to stop urination and then relax the muscles. They can be done in any position along with other activities.

Bladder retraining involves establishing a regular schedule for voiding and making sure to provide the patient the opportunity to void at the correct times. This may be referred to as "prompted voiding". These times should match the patient's normal voiding pattern when possible.

During bladder retraining, the patient should receive adequate amounts of fluids, but the amount should be reduced late in the day to allow the patient to sleep through the night. Behavior modification using rewards or praise for success in staying dry may be a part of the bladder retraining.

When a patient is incontinent, nursing intervention should include protecting the skin. If disposable underpads or undergarments are used, they should be removed promptly when wet. The wet skin should be washed with soap and water and dried thoroughly. Lotion or creams such as zinc oxide ointment may be used to create a barrier to protect the skin from the effects of the urine.

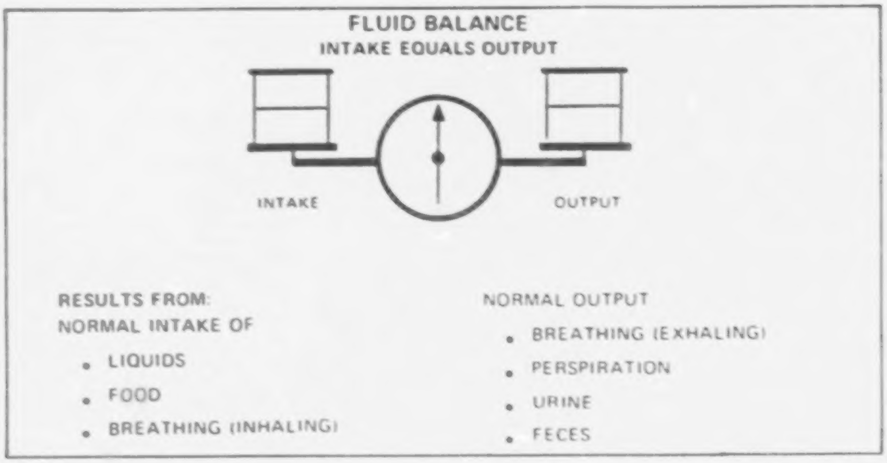
A urinal may be left in place for male patients.

OBJECTIVE 12 — Distinguish among assessment data that may indicate fluid deficit or fluid overload.

The urinary system plays a key role in maintaining fluid balance. The body has four routes for eliminating fluid normally. The greatest amount of fluid leaves the body in the form of urine. The other routes are less noticeable and certainly less measurable. They include the skin, the lungs and in feces. The body's second greatest need is for water, so assessment of fluid balance is an important part of nursing assessment. Fluid deficit (dehydration) and fluid overload are both serious conditions which must be recognized and remedied promptly.

Certain physical conditions carry greater risk of fluid deficit or fluid overload. They include cardiovascular disorders, burns, gastroenteritis, endocrine disturbances, and renal disease. The very young and the elderly are especially prone to fluid imbalance. When fluid imbalance occurs, electrolyte and acid-base imbalance follow. All have serious consequences.

FIGURE 1 Fluid Balance*

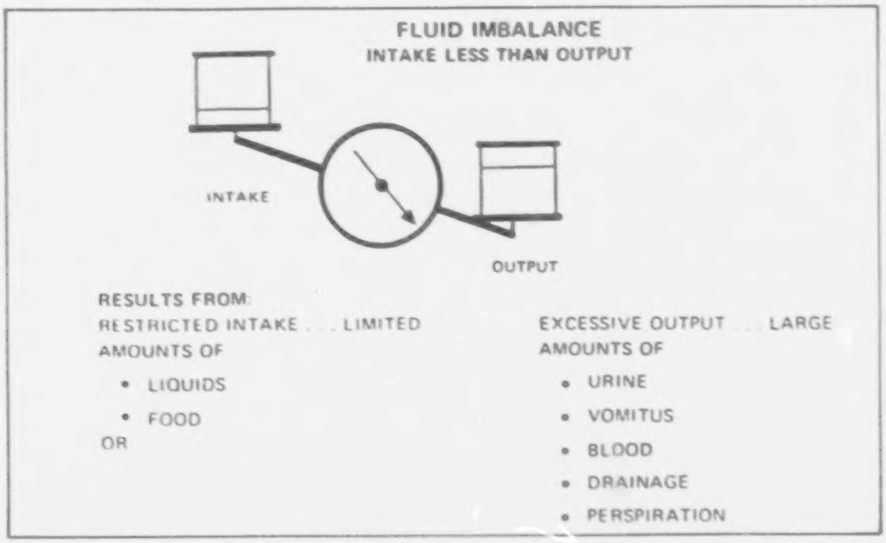


FLUID BALANCE
INTAKE EQUALS OUTPUT

RESULTS FROM:
NORMAL INTAKE OF
- LIQUIDS
- FOOD
- BREATHING (INHALING)

NORMAL OUTPUT
- BREATHING (EXHALING)
- PERSPIRATION
- URINE
- FECES

FIGURE 2 Fluid Imbalance*



FLUID IMBALANCE
INTAKE LESS THAN OUTPUT

RESULTS FROM:
RESTRICTED INTAKE . . . LIMITED AMOUNTS OF
- LIQUIDS
- FOOD

OR

EXCESSIVE OUTPUT . . . LARGE AMOUNTS OF
- URINE
- VOMITUS
- BLOOD
- DRAINAGE
- PERSPIRATION

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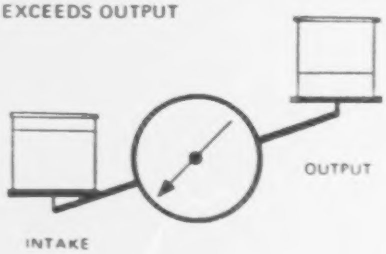
FIGURE 3 Fluid Imbalance*

FLUID IMBALANCE
INTAKE EXCEEDS OUTPUT



RESULTS FROM:

EXCESSIVE INTAKE ... LARGE AMOUNTS OF

- LIQUIDS
- FOOD

OR

RESTRICTED OUTPUT ... LIMITED AMOUNTS OF

- URINE
- PERSPIRATION

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The following table lists some assessment findings which may suggest problems with fluid balance.

ASSESSMENT FACTOR	FLUID DEFICIT	FLUID OVERLOAD
Weight	Weight loss	Weight gain
Temperature	Elevated	Normal
Pulse	Rapid, weak, thready	Full, bounding
Respirations	Rapid, shallow	Moist, labored
Blood pressure	Low	Elevated
Skin and mucous membrane	Skin warm, dry, flushed; Lips dry and chapped; Mucous membrane dry; Tongue dry and coated Poor skin turgor	Cool, pale, moist Edema
Fontanel (in infants)	Sunken	Bulging
Eyes	Sunken appearance	Periorbital edema
Circulatory	Difficult to palpate or distend peripheral veins Fatigue from low blood volume Elevated hematocrit Elevated hemoglobin	Neck veins distended when sitting Low hematocrit Low hemoglobin
Respiratory		Moist lung sounds
Gastrointestinal	Thirst Dry stools or constipation	Frequent moist bowel movements

ASSESSMENT FACTOR	FLUID DEFICIT	FLUID OVERLOAD
Urine	Decreased output	Output less than intake
	Dark, concentrated	Light in color
	Strong odor	Almost odorless
	High specific gravity	Low specific gravity
Nervous system	Weak, sleepy, disoriented	Tense, worried, insomnia
	Convulsions	Convulsions
	Coma	Coma
	Death	Death

- **Weight** — When weighing patients to determine fluid imbalance, some steps must be taken to assure accuracy. The same scale should be used each time and the patient should wear the same amount of clothing. If weights are checked on a daily basis, the weight should be obtained at the same time each day.

- **Skin turgor** — Assessed by gently grasping the skin between the thumb and forefinger and then releasing. If edema is present, grasping will be difficult. In fluid deficit, the skin will rebound to its normal position slowly rather than immediately as it will with adequate hydration. Skin loses its elasticity as a part of the aging process and this must be taken into account in assessing the elderly. Check for skin turgor over the sternum in the elderly.

- **Edema** — **Periorbital edema** describes puffiness about the eyes. **Ascites** is an accumulation of fluid in the peritoneal cavity. **Peripheral edema** describes edema of the extremities, often first noticed in the fingers and ankles. **Pedal edema** involves the feet. **Sacral edema** occurs over the lower back. If a finger is pressed against a body part and the imprint of the finger remains after the finger is removed, the condition is described as **pitting edema**. **Anasarca** is generalized edema.

OBJECTIVE 13

Describe normal intake and output measurements.

An important tool for assessing fluid balance is the intake and output record. The intake and output measurements should be roughly equal with some allowances made for the fact that we cannot measure all fluids consumed or excreted. Normal daily adult measurable fluid intake will usually fall between 1200 - 1500 cc. Normal adult urine output will usually fall between 1000 - 1500 cc. The nurse should always have some idea of the patients intake and output, but many patients are placed on I & O, the abbreviation used for the process of recording the use of fluids by the patient.

It is not too difficult to determine all fluids which enter the patient's body. Anything that is strictly liquid can easily be measured. Of course, we know that many foods contain a significant amount of liquid which we cannot measure. The body also produces some fluid as it uses the food ingested.

We know that the body loses fluid through the urine which can easily be measured. We also lose fluid through the skin, through the lungs with respiration, and through the feces. These cannot be measured. We can, of course, note profuse perspiration, diaphoresis, and liquid stool.

OBJECTIVE 14

List common intake and output sources.

Intake sources

- **Oral liquids** — Water, milk, juice, tea, coffee, soft drinks, etc.; also soups, ice cream, gelatin, custard, popsicles, and ice
- **Tube feedings** — Nasogastric, gastrostomy, jejunostomy
- **Parenteral fluids** — Intravenous fluids, including medication, hyperalimentation (Total parenteral nutrition or TPN), blood and blood products
- **Irrigating fluids** — Intermittent N/G irrigations, continuous catheter irrigations

Output sources

- **Urine** — Voided or collected by catheter or ureterostomy bag
- **Emesis**
- **Drainage from tubes** — Nasogastric tubes, chest tubes, wound drainage devices
- **Fluid obtained from irrigations**

In illness, there may be other ways of obtaining and loosing fluids from the body.

OBJECTIVE 15

Choose the correct word or phrase to complete statements about recording intake and output.

Each health care agency will have special forms for recording intake and output. A temporary bedside form is used to gather information which is transferred to a permanent record included in the chart. Usual practice is to record intake and output for each eight hour shift and total the amounts at the end of a 24 hour period.

Each agency will also have recognized measurements for the capacity of containers used. This includes drinking glasses, coffee cups, ice cream and gelatin servings, and any other items routinely used. This information is usually included on the bedside intake and output form for ease in recording intake. Calibrated plastic drinking glasses are also available.

Intake should be recorded promptly after each meal, after administration of medications, or after between meal snacks. Patients and family members can often be taught the importance and technique of recording oral intake.

Continuous tube feedings and parenteral fluids are administered in containers that are marked to keep track of the amount administered. These readings are used to monitor flow and for recording intake. Irrigating solutions are measured before being used. Continuous irrigations are administered from marked containers.

Output should also be promptly measured and recorded. Signs are frequently posted in patient's bathrooms to let all personnel know that output is being measured. A container should be provided for each patient for whom output is being recorded. Ambulatory patients can use a special specimen pan which fits underneath the toilet seat.

Patients with Foley catheters have collection bags which should be emptied at the end of each shift or more often as necessary. The collection bag is constructed of flexible plastic with graduations marked. This should not be used as the measurement for output. The urine should be drained into a rigid plastic calibrated container for more accurate measuring. When hourly urine output is measured for the patient with a Foley catheter, a urine meter may be used.

Emesis basins may be calibrated or the contents can be poured into the calibrated container. Collection devices for nasogastric suction and chest tube drainage are calibrated. The level of drainage is marked on the container at the end of each shift. Wound suction devices are usually emptied at the end of the shift.

Output which cannot be measured should be described and an amount estimated. This could include emesis on the bed or floor, wound drainage on dressings or bedding, urine of an incontinent patient, and profuse perspiration (diaphoresis). Notes on the consistency of stool might also be useful in assessing fluid balance.

OBJECTIVE 16

Identify containers used to measure intake and output.

Containers used in measurement of intake and output

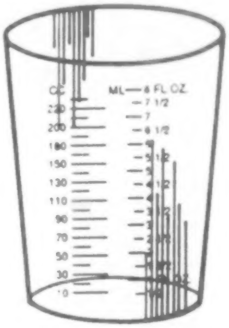

CC
220
200
180
150
130
110
90
70
50
30
10
ML — 8 FL OZ
7 1/2
7
6 1/2

FIGURE 4
Drinking glass

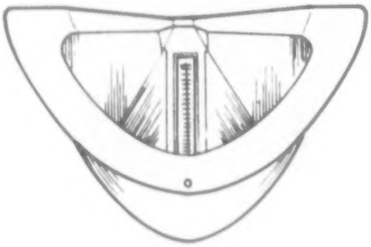
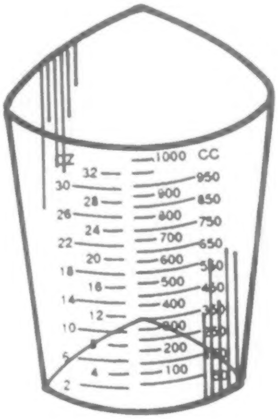


FIGURE 5
Specimen pan (Hat)


OZ
32
30
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14
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8
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900
850
800
750
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650
600
500
400
200
100

FIGURE 6
Calibrated container

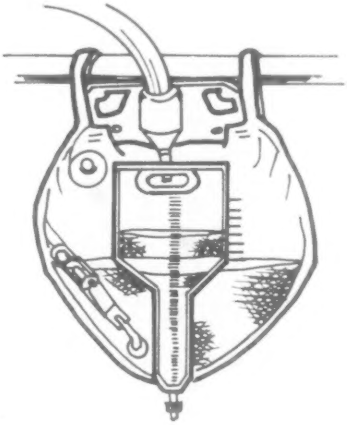


FIGURE 7
Urine meter

OBJECTIVE 17

Convert common measurements used in calculating intake and output.

Intake and output measurements are expressed in metric measure. The cubic centimeter (cc) or milliliter (ml) are the measurements most often used. The two terms are equal and may be used interchangeably based on the preferences of the agency. The liter consists of 1000 cc's or ml's. This is the capacity of most intravenous solution containers. A liter is approximately the same amount as a quart with a quart, containing 960 cc's.

We are accustomed to dealing with some oral fluids in terms of ounces. Soft drink cans and baby formula are examples. It will frequently be necessary to convert measurements from ounces to the metric measures for recording. The following table lists amounts the nurse might find useful.

1 cc	1 ml
¼ teaspoon	1 cc or 1 ml
1 teaspoon	4 cc or 4 ml **NOTE:** Some references list this figure as 5 cc/ml.
1 ounce	30 cc or 30 ml
1 quart	960 cc or 960 ml
1 liter	1000 cc or 1000 ml

One other piece of information is essential for recording oral intake. **Ice melts to one-half its unmelted volume**. Therefore, if ice were filled to the 100 cc mark in a calibrated drinking glass, it would melt to 50 cc.

With this information the nurse should be able to calculate intake amounts.

OBJECTIVE 18

State the goals of nursing interventions for patients with catheters.

Nursing interventions must be aimed at

- **Preventing infection**

  Indwelling catheters should only be used when absolutely necessary. Their presence invites infection. The body perceives the catheter as a foreign body and initiates the inflammatory response.

- **Assuring proper functioning of the catheter**

  Correct positioning of the catheter and drainage bag assists gravity in draining the bladder. Kinks in the catheter or pressure on the catheter will block drainage.

OBJECTIVE 19

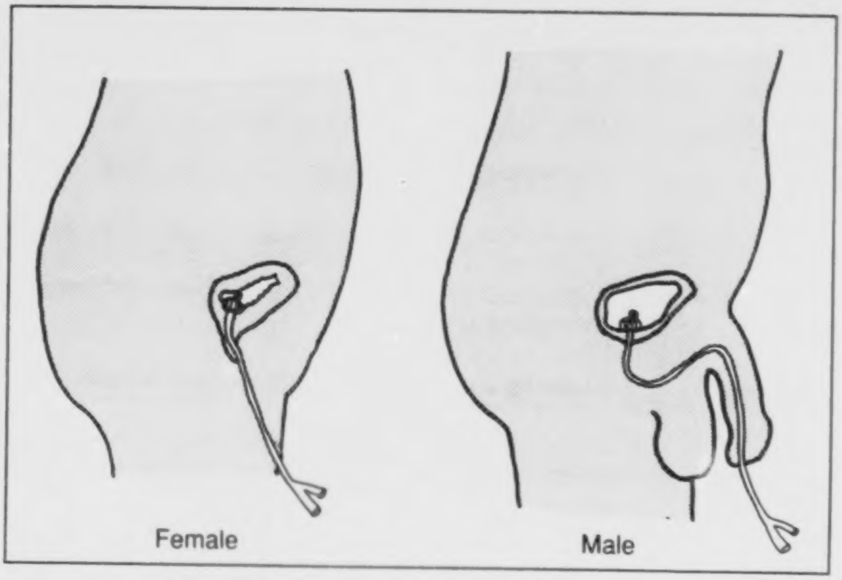
Choose the correct word or phrase to complete statements about catheter tubes, drainage bags and collection ports, and patient care.

The catheter is connected to a drainage bag for continuous collection of urine. A closed system is maintained to prevent the introduction of any organisms into any point in the system. There is a drainage tube in the bag for emptying and measuring the urine collected. A special sleeve protects the tip of the tube between times of use.

The catheter has a special collection port for collecting urine specimens. A sterile needle is inserted into the port to withdraw urine while maintaining the closed system.

With an indwelling catheter, also called a Foley or retention catheter, the catheter is inserted using sterile technique and then a small balloon is inflated to prevent the catheter from slipping back out of the bladder. The catheters are described as *double lumen catheters*, meaning that one lumen, or channel, drains urine from the bladder and the other is used for inflating and deflating the balloon.

FIGURE 8 Catheters in bladder



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Collection bag with catheter

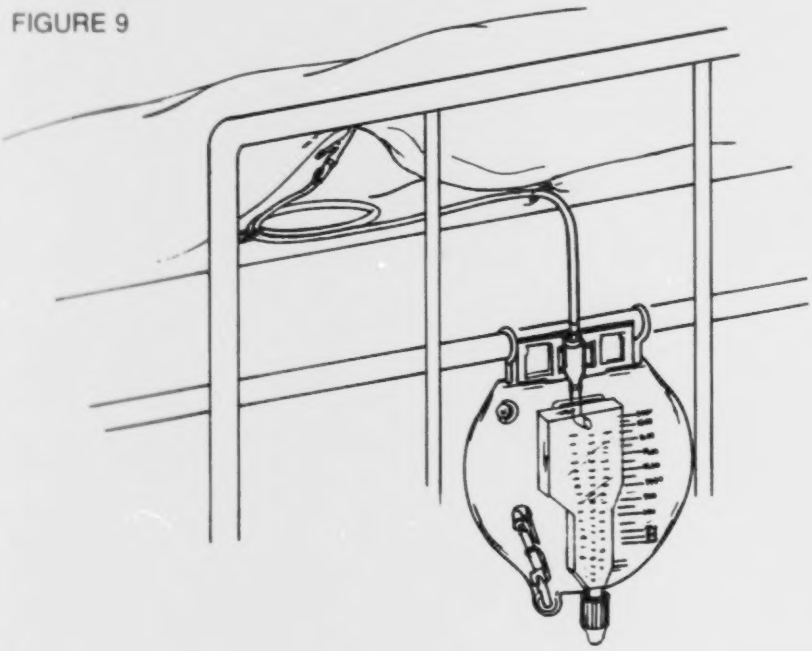
The collection bag must be kept below the level of the bladder to prevent reflux, or back flow, of urine toward the bladder. Additionally, the entire drainage tubing should be higher than the entry port where the tube enters the bag.

When the patient is in bed, the drainage bag should be connected to the frame of the bed, not the siderails. The drainage tubing should be coiled in the bed and not allowed to hang over the side. It will help if the tubing is attached to the linens by means of the clamp provided on most sets or by a rubber band and safety pin.

The nurse must also inspect the tubing frequently to avoid kinks which would hinder the flow of urine. The weight of the patient lying on the tubing can also block the flow.

Most patients will be more comfortable if the catheter is taped to the inner aspect of the thigh. This prevents pulling and makes turning easier.

FIGURE 9



Proper placement of catheter and collection bag

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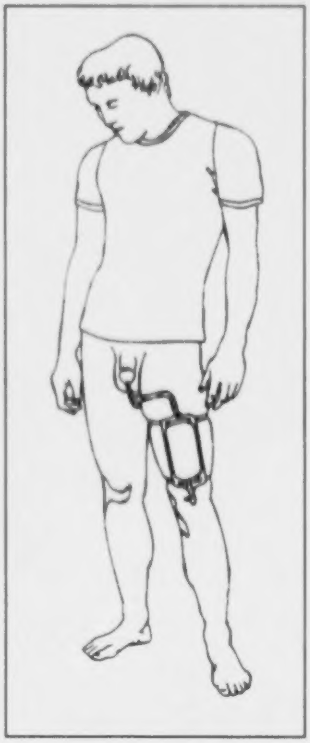
When the patient is in a chair, the bag should be positioned at a point below the level of the bladder, but not lying on the floor. Avoid having the bag in contact with the wheels of a wheelchair.

Ambulatory patients who must have an indwelling catheter might wear a leg bag when they are up. When the patient returns to bed, a larger drainage bag should be used since the smaller capacity of the leg bag could encourage reflux when lying flat.

FIGURE 10 Leg bag*



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OBJECTIVE 20

Choose the correct word or phrase to complete statements about nursing care of the patient with a catheter.

The point where the catheter enters the urinary meatus must be kept clean with soap and water catheter care. The procedure is discussed with personal cleanliness measures. All cleaning strokes should be away from the urinary meatus to keep the area clean.

Patients with indwelling catheters should be encouraged to drink large quantities of fluids to ensure an adequate flow of urine. This prevents small quantities of urine from standing in the bladder and providing a site for the growth of pathogenic organisms. A free flow of urine also prevents the formation of sediment which would clog the catheter openings.

The nurse should observe the indwelling catheter every two to three hours to check that the catheter is still intact and draining freely. The tubing should be observed to see that there is a flow of urine and to assess color and clarity of the urine. The position of the drainage tubing and bag should be observed to assure proper function.

OBJECTIVE 21

Choose the correct word or phrase to complete statements about guidelines for collecting urine specimens.

The nurse will frequently be asked to assist in the collection of urine specimens. A great variety of laboratory tests can be performed on urine. Routine urinalyses are done frequently. The nurse should know what test will be performed on the specimen because requirements in collection method, amount needed, and type of container used will vary.

It is always preferable that voided specimens be collected directly into the collection container, but for females especially, this is not always easy. If the specimen is first collected in a bedpan or urinal, the receptacle should be clean and free of fecal contamination. Toilet tissue should not be placed in the receptacle.

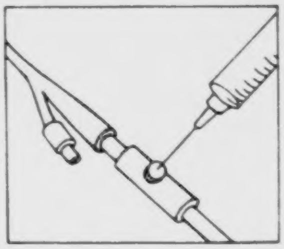
Most specimen collection containers used today are disposable, single use containers. The inside should not be touched since this might introduce material to alter the outcome of the test. Overfilling should be avoided because it frequently causes contamination of the outside of the container. 50 cc of urine will be sufficient for most analyses.

The container should be closed with its tight-fitting lid immediately after the specimen is collected and the patient's name should be marked on the container. A piece of adhesive tape with the patient's name may be affixed if no other type of label is available.

The container should be placed in a plastic bag for transportation to the laboratory. The specimen should be transported as soon as possible. If there will be a delay, the specimen may be refrigerated to prevent deterioration of the urine and alteration in the laboratory analysis.

If urine is to be collected from a patient who has an indwelling catheter, the collection port should be used. Urine should not be collected from the drainage bag since it has been standing, causing test results to be inaccurate. The catheter is clamped below the port for about 15 minutes before collecting the specimen. The port is cleaned with alcohol or povidone iodine before puncture. Enter the port using a sterile needle and syringe and withdraw about 5-10 cc of urine. Unclamp the catheter.

FIGURE 11 Collection port* Inserting the syringe needle into the catheter



When a culture and sensitivity is ordered, a sterile specimen may be desired. *Culture* refers to identifying organisms in the urine and *sensitivity* determines what antibiotics will be effective against pathogenic organisms in the urine. If a sterile specimen is indicated, this means a catheterized specimen is needed.

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Clean catch or midstream specimens refer to the method of collecting the voided specimen to avoid contamination. They are frequently used for culture and sensitivity tests. A sterile collection container is used. The area around the urinary meatus is cleansed with an antiseptic. Voiding is begun into the toilet stool or other receptacle and then the midstream urine is collected in the specimen container. Voiding is then completed into the toilet stool or other receptacle. This prevents any organisms from the external genitalia or urethra and any sediment from the bladder from being collected.

A cumulative specimen collection tests urine for quantities of a substance excreted during a prescribed period, such as for 24 hours. In this type of collection, appropriate containers must be obtained before beginning the collection. For some collections, preservatives must be added. The urine collected must be kept cold either by storing in a refrigerator or by keeping the containers in ice. The collection is begun by having the patient void and discarding the urine. All other urine is saved including urine voided at the time when the collection is to be ended.

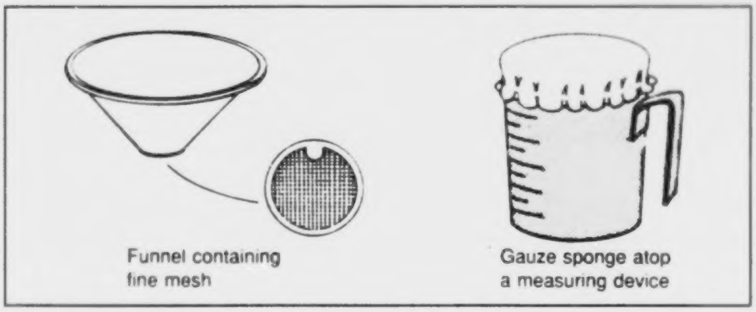
At times, a double-voided, or second-voided, specimen may be needed. This requires the patient to void and then to void again in approximately 30 minutes. The second specimen is used for testing. This assures that the urine reflects more current body function. The first specimen may have been standing in the bladder for some period of time. It will be helpful to have the patient drink plenty of fluids to aid in collecting the second specimen.

There must be some communication to the laboratory giving instructions about the test ordered. A requisition may be filled out by hand or entered through a computer. The requisition must be complete with all required information and any special instructions and must accompany the specimen.

Collection of any type of specimen should always be documented including the type of specimen collected, observation of the specimen and what was done with the specimen. Documentation should also include any complaints of the patient in obtaining the specimen.

For some patients, every voiding becomes a urine specimen because they have renal calculi or kidney stones. These patients must have all urine strained, using either a special funnel with fine mesh in the bottom or filter paper that will catch any solid material. The nurse must examine the mesh or filter paper carefully for any small particles of kidney stone.

FIGURE 12 Containers for straining urine*



OBJECTIVE 22

Select from a list ways to adapt the collection of urine specimens to meet the needs of various age groups.

Collecting urine specimens from the very young and the elderly may require some adaptation of methods. Lack of toilet training or partial toilet training and incontinence may cause difficulty in collection of specimens at either end of the age spectrum. A potty chair for the young and a bedside commode for the elderly will make collection easier. For specimens such as a 24 hour collection, signs should be posted and even attached to the ambulatory patient so all will be aware that the collection is in progress.

- **Infants** — Special plastic, adhesive-backed urine collection bags are available for use with infants. The perineal area should be washed and thoroughly dried before attaching the device. Both the penis and the scrotum should be placed within the opening of the bag for males.

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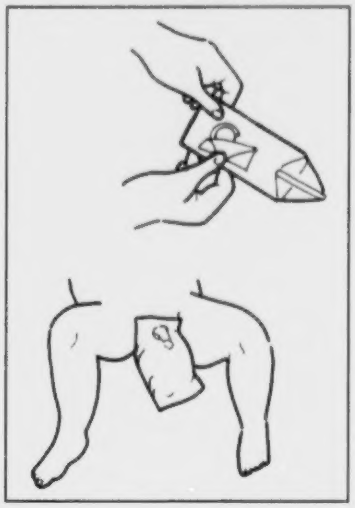
FIGURE 13 Pediatric urine collecting device



The female perineum should be stretched taut before application to assure a seal around the urinary meatus.

For some testing procedures when only a few drops are needed, a syringe without the needle attached may be used to withdraw urine from a diaper that is squeezed. Dry cotton balls may be placed in the diaper for collection of small amounts of urine.

- **Children** — Use terms the child understands.
- **Elderly** — The elderly may have difficulty hearing instructions. In addition, they may have difficulty seeing and handling equipment. The nurse may have to carry out the steps for procedures such as clean catch specimens.

CONDOM (EXTERNAL) CATHETER

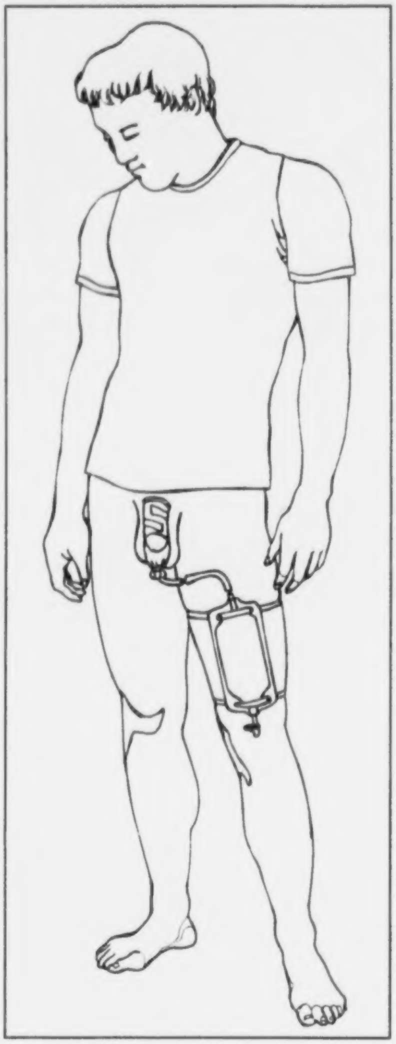
There is a definite possibility of urinary tract infection when indwelling catheters are used. For that reason, male patients will sometimes have external catheters or condom catheters rather than indwelling catheters. The nurse may use one that is commercially prepared or make one using a condom. Patients may use one at home and prepare their own.

When applying the external catheter, tape is applied in spiral fashion rather than in circles. The circular pattern could constrict circulation. Commercially prepared types may come with velcro or elastic-like bands.

There should be a space between the tip of the penis and the port for the drainage tubing to prevent irritation of the penis. This space may become twisted and block the flow of urine, so it needs to be checked frequently.

Before applying and when changing the external catheter, wash and dry the penis thoroughly. A new external catheter should be applied daily. Inspect the penis for any signs of irritation when one is used.

FIGURE 14 Condom catheter with leg bag*



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SPECIFIC GRAVITY

In some care settings, nurses may have to monitor specific gravity readings on a regular basis. For example, burn patients or patients receiving large quantities of parenteral fluids would be at great risk for fluid deficit or fluid overload. Specific gravity determinations would help in monitoring.

The instrument most commonly used to determine specific gravity is a refractometer. The refractometer has a slide for placing a drop of urine. The nurse then looks through an eyepiece to see where the urine crosses a scale. The instrument would have manufacturers instructions for use.

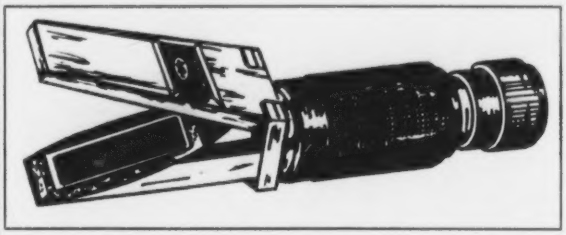

FIGURE 15 Refractometer

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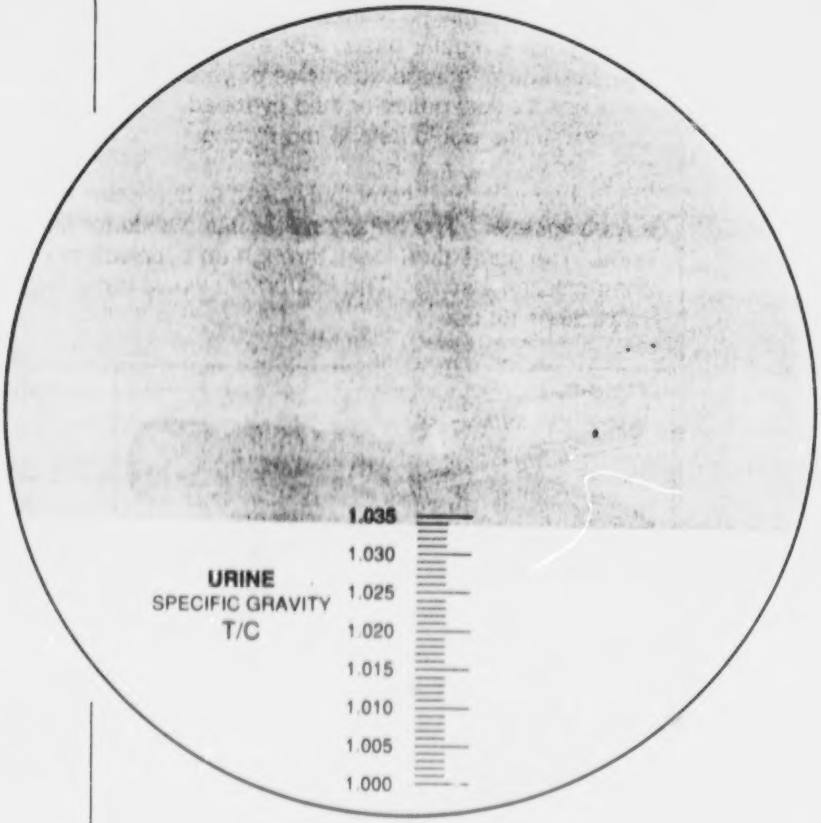

1.035
1.030
URINE
SPECIFIC GRAVITY
T/C
1.025
1.020
1.015
1.010
1.005
1.000

FIGURE 16 Specific Gravity Scale

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COLLECT A URINE SPECIMEN IN AN ISOLATION ROOM

INTRODUCTION

Even though a patient may require isolation precautions, he still will need a number of other nursing procedures completed. Some variation may be necessary in order to maintain the isolation precautions. The exact measures will depend upon the organism and disease being isolated. Generally, the following measures are for the strictest of isolation procedure.

EQUIPMENT

- Isolation cart outside door containing gowns, masks, gloves, isolation bags (usually red), fasteners for bags, labels, marking pen
- Private room with toilet and sink
- Instruction card for door
- Soap dispenser
- Paper towels
- Plastic lined trash container
- Specimen container
- Requisition for test ordered

PROCEDURE

Assessment and Analysis

1. Check medical diagnosis and nursing diagnosis to determine the type of materials needed and specific needs of patient.

2. Check doctor's orders to determine the type of specimen needed.

3. Check agency policy manual to determine specific procedures.

Planning

4. Assemble all equipment.

   NOTE: Be certain all necessary items are present to avoid coming back out of isolation unit.

Implementation

5. Wash hands.

6. Don protective gear indicated by type of isolation.

7. Place any equipment being brought into room on clean paper towel to avoid contamination.

   NOTE: Take in only supplies that will be used since items will have to be discarded or thoroughly cleaned before use by another patient.

8. Leave cover of container on isolation cart outside of room.

9. Place specimen container on clean paper towel.

10. Have patient void into bedpan or urinal.

11. Pour urine into container without splashing urine on outside of container or touching container in any way.

12. Clean and store bedpan or urinal.

13. Remove garments and wash hands.

14. Carry container outside room being careful not to splash urine.

15. Place lid on container and place entire container in plastic bag labeled as isolation specimen.

16. Place label with specimen.

17. Take or send specimen to lab immediately.

Evaluation

18. Evaluate according to following criteria:

    a. Specimen was obtained without contamination.

    b. Urine was clear yellow without unusual odor.

    c. Patient experienced no difficulty in voiding.

Documentation

19. a. Time of collection

    b. Type of test ordered

    c. Any abnormal amount, appearance or odor of urine

d. Any difficulty encountered in collection of specimen

e. Any complaints of patient

f. Transportation of urine to laboratory

ACTIVITY SHEET 1

PROVIDE URINARY CARE

IX

PRACTICE MEASURING INTAKE AND OUTPUT

DIRECTIONS

Work with a partner to practice measuring intake and output. You will need a water pitcher, a drinking glass, an emesis basin, a bedpan, and a calibrated container. One partner should fill the containers to various levels with water and the other should practice measuring the amounts in the graduate. Record them on a bedside intake and output sheet provided by your instructor.

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (calibrated container)

Interactive Communication Skills
- Communicate with co-workers

General Relating Skills
- Interact with co-workers

Job Acquisition/Development Skills
- Master specific job task/procedure
- Deal effectively with co-workers

Basic Skills (continued)

PROVIDE URINARY CARE

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for:
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instrument (calibrated container)

ORAL COMMUNICATION SKILLS

— Communicating with co-worker

INTERPERSONAL/RELATING SKILLS

— Interacting with co-worker

EMPLOYABILITY SKILLS

— Mastering a specific job task/procedure

— Dealing effectively with co-worker

- If students have difficulty completing forms and records:
    - Examine the structure of the forms being used. Discuss the importance of recording data accurately.
- If students have difficulty using English and metric measures:
    - Review units of measure in the English and metric systems.
    - Determine which measurement system is used on available instrument and demonstrate its use.
- If students have difficulty collecting/recording data, stress the importance of accuracy in recording data.
- If students have difficulty making measurements:
    - Review the measurement system being used.
    - Demonstrate the correct way to measure using the specific measuring instrument.
- If students have difficulty using scientific instruments (calibrated containers), demonstrate the use of the instrument.
- If students have difficulty communicating with co-workers:
    - Discuss the importance of working well with others.
    - Review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.
- If students have difficulty mastering a specific job task/procedure:
    - Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.
    - Suggest they study each component of the procedure to determine which area is causing difficulty.
    - Review the entire procedure.

- Team them with proficient students or professionals to practice the procedure.

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ASSIGNMENT SHEET 1

PROVIDE URINARY CARE

IX

NAME ______________________ SCORE ________

OBJECTIVE 23

Assess the urinary system and fluid balance.

INTRODUCTION

Assessment of fluid balance and the urinary system are very closely related.

DIRECTIONS

Choose a patient and complete the following physical assessment data.

Temperature___Pulse___Respiration___Blood Pressure___

Weight___

Observe the skin. (Is it warm? cool? dry? moist? flushed? pale?)

____

Check the skin for turgor and for the presence of edema.

____

Check the condition of the mucous membrane. (Is it moist or dry?)

____

Observe the patient's orientation and emotional state. (Is the patient oriented? Is he tense?)

____

Palpate the lower abdomen for signs of a distended bladder. (Is it firm? Does it appear rounded?)

____

Observe the urine for amount, color, clarity, and odor.

____

Functional Reading Skills
- Follow written instructions
- Use content area vocabulary

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (thermometer, sphygmomanometer, watch, scale)
- Collect specimens

Life Science Skills
- Investigate/apply principles of anatomy/physiology

- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients

Obtain the following information from the patient.

Is there a history of urinary problems?

Is there a family history of renal problems?

Is there any history of cardiovascular disease or endocrine disturbances?

Is there a history of sexually transmitted disease?

Ask female patients about the number of children and type of deliveries.

Question the patient about any weight gain or loss.

Has the patient noticed that it is more difficult to remove rings? Do shoes seem tight? Is there swelling of the ankles?

Does the patient experience unusual thirst?

Question the patient about any problems with patterns of voiding. Is there:

Polyuria___Oliguria___Nocturia___Urgency___Frequency___

Incontinence___Dysuria___Burning on urination___

Does the patient complain of flank, back or abdominal pain? Does the pain radiate?

____

Does the patient experience chills?

____

Has the patient ever had a urinary catheter?

____

What examinations of the urinary system has the patient had in the past?

____

Does the patient have any allergies? (Question specifically about allergies to iodine since this may be used prior to procedures like catheterization and as an intravenous dye for a pyelogram which allows for X-ray visualization of the kidney.)

____

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions
— Using content area vocabulary

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (thermometer, sphygmomanometer, watch, scale)

— Collecting specimens

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

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ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty using content area vocabulary, stress the importance of learning medical terminology.

- If students have difficulty collecting specimens:
  - Explain that although this procedure sometimes makes new students nervous, it is an easy, essential procedure that becomes routine with practice.
  - Discuss the extreme importance of following all safety practices.
- If students have difficulty investigating/applying principles of anatomy/physiology, review unit on urinary system in *Body Structure and Functions* or similar text.
- If students have difficulty investigating health issues:
  - Discuss the many ways in which information obtained from a urine sample is used.
  - Discuss the health problems that can be identified by urinalysis.
- If students have difficulty applying active listening skills:
  - Encourage them to familiarize themselves with background information before communicating with the patient.
  - Instruct them to practice listening and then repeating the information.

    EXAMPLE: Patient: "My mother had kidney problems."
    Student: "Your mother had kidney problems, so there is a family history of renal problems."

  - Suggest that they be ready to listen before beginning the communication.
  - Stress the importance of focusing on the speaker.
  - Maintaining eye contact enhances listening ability.

- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions are begun.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Emphasize the importance of practice in mastering this skill.
- If students have difficulty applying questioning techniques, stress the importance of accurate questioning to identify subjective symptoms.
- If students have difficulty analyzing/applying non-verbal communication:
  - Discuss some ways in which patients reveal information non-verbally.

    EXAMPLE: Facial expression Movements
    Body position Tone of voice
    Mannerisms

  - Discuss ways in which the students can convey concern for the patient non-verbally.

    EXAMPLE: The student can express concern for the patient by providing privacy during a procedure.
- If students have difficulty communicating with, interacting with, or dealing effectively with the patients, review listening skills, giving/following oral directions, questioning techniques, and nonverbal communication skills.
- If students have difficulty obtaining confidence of others:
  - Suggest they review communication and interpersonal/relating skills.
  - Suggest they review appropriate behavior.
  - Suggest that they review the procedure and the part they play in the procedure.

  - Discuss the importance of having a positive attitude.
  - Discuss with a trusted professional the reasons that may be contributing to the lack of confidence.
- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient in a dignified manner.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal/relating skills.
- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices. Review the safety practices relevant to the specific task.
- If students have difficulty developing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.
  - Make sure the student knows what is expected of him or her.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

ASSIGNMENT SHEET 2

PROVIDE URINARY CARE

IX

NAME ______________________ SCORE ________

OBJECTIVE 24 **Calculate intake and output.**

INTRODUCTION Most hospital intake and output forms ask for totals in various categories for each shift. The total intake and the total output may be added for comparison of the two as a check on fluid balance.

DIRECTIONS Use the following equivalents or equivalents supplied by your instructor to complete the assignment sheet.

Water glass = 240 cc	Juice = 120 cc
Coffee cup = 180 cc	Milk carton = 240 cc
Iced tea = 300 cc	Gelatin = 90 cc
Soup or cereal bowl = 240 cc	Ice cream = 90 cc

PART I

Functional Writing Skills
- Complete forms and records

Operation and Calculation Skills
- Calculate with whole numbers
- Calculate with fractions
- Perform metric calculations
- Converts units of measure

Math Application Skills
- Solve word problems
- Use English and metric measures

Mr. Brooks has had surgery and is now receiving a clear liquid diet. Use the information about his intake and output to complete his intake and output record. (Complete a form supplied by your instructor.)

Breakfast-8:00 A.M.	Lunch-12:00 noon	Dinner-5:30 P.M.
1/2 bowl broth	1 bowl broth	1/2 bowl broth
1 glass juice	1/2 bowl gelatin	1 bowl gelatin
1/2 glass tea	1 cup coffee	

At 5:00 A.M. he drank 1/2 glass of water
At 10:30 A.M. he drank one 12-ounce can of soda pop
At 2:00 P.M. he had 1/2 water glass of ice chips
At 8:00 P.M. he had 1/2 serving of gelatin

Mr. Brooks voided the following amounts.

11-7	7-3	3-11
400 cc	350 cc	350 cc
	200 cc	340 cc
	500 cc	

Job Acquisition/
Development Skills
- Master specific job task/procedure

The following amounts were emptied from his wound drain.

11-7=50 cc
7-3=80 cc
3-11=40 cc

The following amounts of IV fluids infused.

11-7=700 cc
7-3=500 cc
3-11=200 cc

PART II

Ms. Morris has just completed the following meal. Determine her fluid intake.

4 oz baked chicken
1 baked potato
1 serving green beans
1 serving ice cream
1 cup coffee
1/2 glass water

Total intake____________________

PART III

Mr. Crawford has just completed the following breakfast. Determine his fluid intake.

2/3 bowl cream of wheat
1 slice toast
1 glass juice
1/2 carton milk
2 cups coffee

Total intake____________________

BASIC SKILLS

PROVIDE URINARY CARE IX

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 2

Skill development for: WRITING SKILLS
MATHEMATICS SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing, mathematics, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

  WRITING SKILLS

  - Completing forms and records

  MATHEMATICS SKILLS

  - Calculating with whole numbers
  - Calculating with fractions
  - Converting units of measure
  - Performing metric calculations
  - Solving word problems
  - Using English and metric measures

  EMPLOYABILITY SKILLS

  - Mastering a specific job task/procedure

- If students have difficulty calculating with whole numbers, calculating with fractions, or calculating with metric measures, review basic math skills.

- If students have difficulty calculating with fractions, remind them that fractions refer to a part of a whole.

- If students have difficulty calculating with metric measures, review the metric system.

- If students have difficulty converting units of measure:
    - Have them study the units in the English and metric systems.
    - Instruct them to review a basic conversion chart.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

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ASSIGNMENT SHEET 1

Assessment will vary according to patients assessed. The instructor will have to judge for accuracy in each case.

ASSIGNMENT SHEET 2

PART I

Exact answers will be determined by the intake and output sheet used. The following figures may be required.

Intake		Output	
11-7	820 cc	11-7	450 cc
7-3	1775 cc	7-3	1130 cc
3-11	455 cc	3-11	730 cc
24 hour	3050 cc	24 hour	2310 cc

PART II 390 cc

PART III 760 cc

JOB SHEET 1 — PROVIDE URINARY CARE — IX

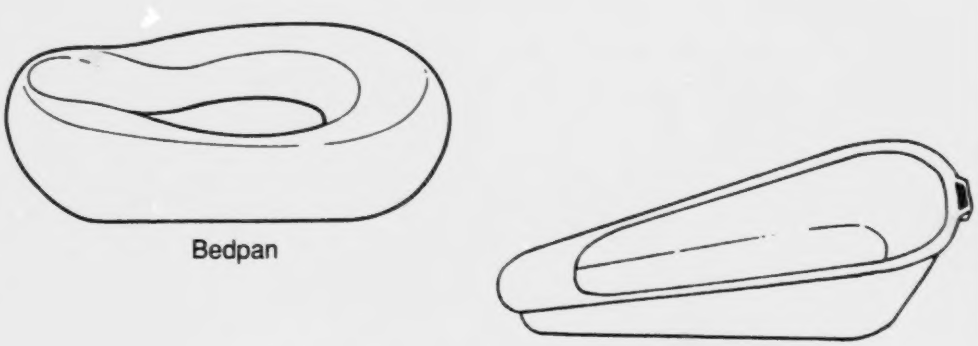
OBJECTIVE 25a **Assist a patient with a bedpan or fracture pan.**

INTRODUCTION

Many hospitalized patients must use a bedpan because they are unable or not allowed to get out of bed. Most would not consider it a pleasant experience. The nurse who can assist and position the patient adequately will make the experience less objectionable.

For patients who have difficulty with the regular size bedpan, the smaller fracture pan may be used. This requires less movement on the part of the patient. In either case, the nurse must remember to position the patient on the flat portion intended as the "seat" of the bedpan. To do otherwise would make the patient extremely uncomfortable.

FIGURES 17 and 18 Bedpan and Fracture Pan



Bedpan

Fracture pan

EQUIPMENT AND SUPPLIES

- Bedpan or fracture pan
- Toilet tissue
- Gloves
- Disposable underpad (optional)
- Cloth or disposable bedpan cover
- Soap, washcloths, and towels as indicated

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (calibrated container)
- Collect specimens

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/ patients

Assessment and Analysis

1. Determine patient's ability to assist with procedure.
2. Note any nursing or medical diagnoses which would alter procedure.

Planning

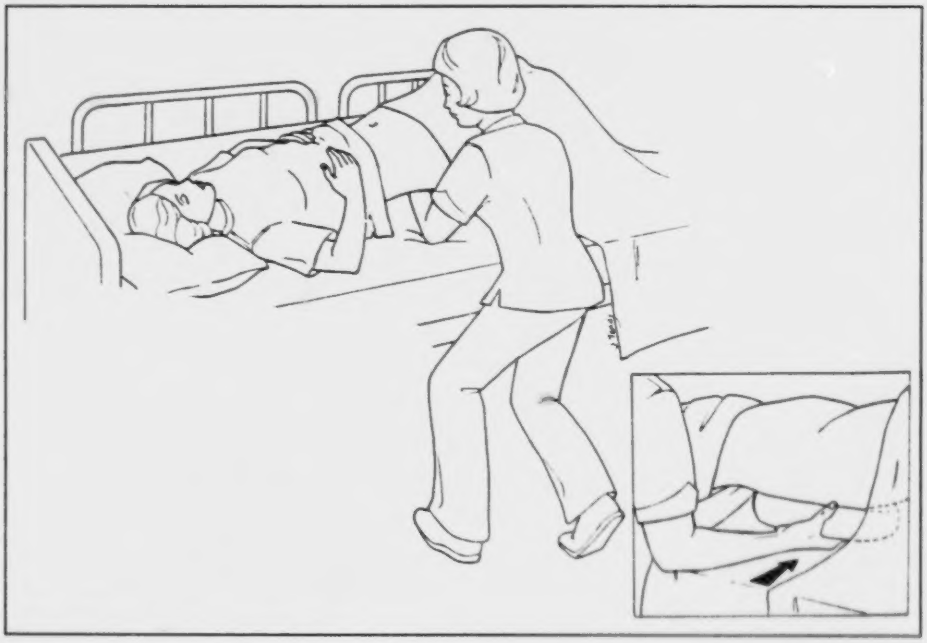
3. Determine the bedpan that should be used.
4. Enlist the aid of an assistant, if needed.
5. If the bedpan is cold, warm it by filling with warm water and emptying it. Dry with paper towel.
6. Explain procedure to patient.
7. Provide privacy.
8. Raise bed to comfortable working height.
9. Place patient in supine position with head of bed flat, if not contraindicated.

Implementation

Placing the bedpan

10. Fold the top linens and gown out of the way without exposing the patient.
11. For patient who can assist:
    a. Instruct patient to flex knees and push against mattress with feet to raise buttocks.
    b. Slide hand under lumbar area to assist patient in raising buttocks.
    c. Place disposable underpad, if desired.
    d. Slide bedpan into position.

FIGURE 19 Placing the bedpan*



General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

12. For patient who cannot assist:
    a. Turn patient to side.
    b. Place disposable underpad if desired.
    c. Place bedpan in position against buttocks.
    d. Turn patient back onto bedpan.

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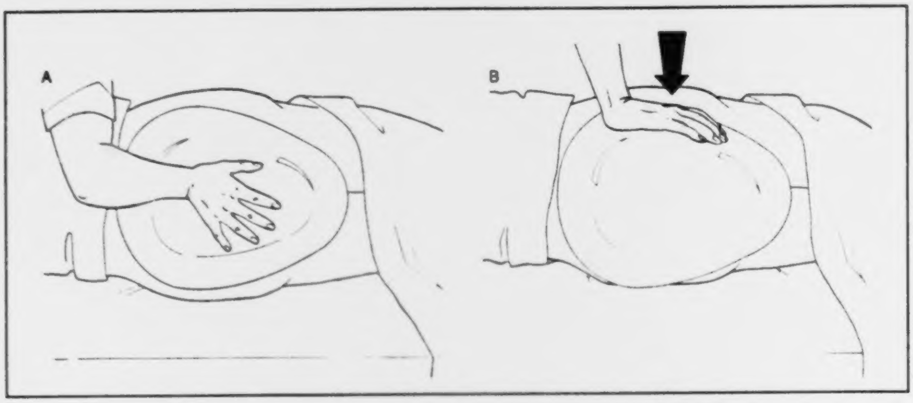
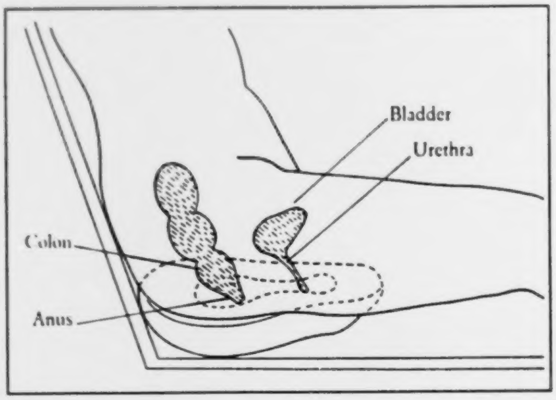
*Source: Hogan/Sorrentino; *Textbook for Long-Term Care Assistants*, © 1988, St. Louis, The C.V. Mosby Company. Used with permission.

FIGURE 20 Placing the bedpan*



13. Check patient for correct position on bedpan.

FIGURE 21 Positioning the bedpan*



Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients

14. Reposition linen.

15. Raise head of bed if not contraindicated.

16. Provide patient with toilet paper and the call light.

17. Wash hands and provide privacy for the patient.

18. Check on patient after appropriate time or answer call light promptly.

*Source: Hogan/Sorrentino; *Textbook for Long-Term Care Assistants*, © 1988, St. Louis. The C.V. Mosby Company. Used with permission.

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Removing the bedpan

19. Don gloves.

20. If patient can assist:

    a. Instruct patient to flex knees and press feet against bed to raise buttocks.

    b. Slide bedpan from beneath patient, being careful not to spill contents.

21. If patient cannot assist:

    a. While holding bedpan level, assist patient to turn to side off of bedpan.

    b. Remove bedpan

22. Wipe area with toilet tissue, if patient cannot do so, wiping from front to back.

23. Wash and dry area, if indicated.

24. Remove disposable underpad, if one was used.

25. Observe contents of bedpan, measuring urine if patient is on intake and output.

26. Empty bedpan or collect specimen, if needed.

27. Rinse bedpan with cold water and cleanse thoroughly.

    NOTE: Body excretions are protein material which will be hardened by hot water.

28. Return bedpan to storage place.

29. Remove gloves and wash hands.

30. Provide patient with warm, wet wash cloth or basin of water to wash hands.

31. Position patient comfortably with bed at lowest level and call light in place.

32. Wash hands.

Evaluation

33. Evaluate according to following criteria:

    a. Procedure was accomplished with a minimum of discomfort to patient.

    b. Patient was able to use bedpan.

    c. Elimination was not unusual in any manner.

    d. Perineal area was cleaned and dried.

    e. Perineal area shows no sign of redness or skin breakdown.

Documentation

34. Document:

    a. According to agency policy.

    b. Record urine on intake and output sheet as necessary.

    c. Describe any unusual characteristics.

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PROVIDE URINARY CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (calibrated container)

— Collecting specimens

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet and Assignment Sheet 1.

JOB SHEET 2

PROVIDE URINARY CARE

IX

OBJECTIVE 25b

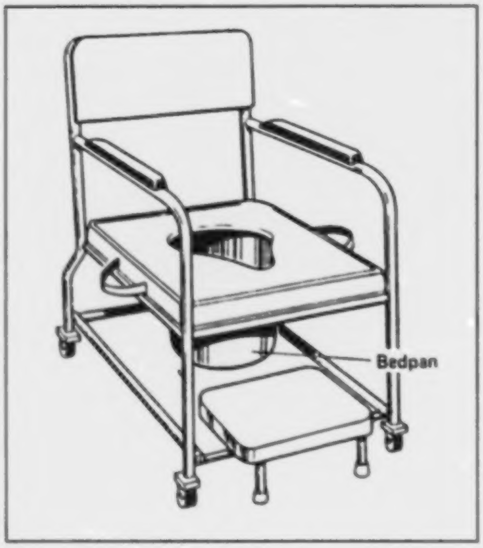
Assist patient to the bathroom or bedside commode.

INTRODUCTION

Most patients will find going to the bathroom or using the bedside commode preferable to a bedpan. Both of these offer a more natural position for elimination and are more comfortable.

A bedside commode is a chair-like device with a toilet seat. A bedpan or other container is placed under the seat. When patients cannot make the trip all the way to the bathroom, it is a convenient alternative. Some commodes have wheels for easy positioning.

FIGURE 22 Bedside commode*



EQUIPMENT AND SUPPLIES

- Bedside commode
- Toilet tissue
- Slippers
- Robe (optional)
- Bath blanket (optional)
- Gloves
- Washcloths, towels, soap, and water as indicated

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*Will/Eighmy: *Being a Long-Term Care Nursing Assistant*, © 1988, pp233, Englewood Cliffs: Prentice-Hall, Inc. Used with permission.

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (calibrated container)
- Collect specimens

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

Assessment and Analysis

1. Determine patient's ability to ambulate.
2. Determine patient's need for assistance.
3. Note any medical or nursing diagnoses which would contraindicate or complicate procedure.

Planning

4. Explain procedure to patient.
5. Obtain slippers and robe, if desired.
6. Provide privacy.
7. Position bedside commode conveniently with wheels locked.
8. Remove all obstacles from area of commode or path to bathroom.
9. Place bed at lowest position.
10. Elevate head of bed to assist in getting up.

Implementation

11. Assist patient to sitting position at side of bed.

    NOTE: Use technique as for dangling patient.

12. Assist patient in putting on slippers and robe, if desired.

    NOTE: Make sure the patient will stay comfortably warm while up.

13. Assist to stand and pivot to bedside commode or assist to walk to bathroom.

    NOTE: Use techniques for assisting patient to chair or for assisting patient to walk.

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General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients

14. Assist patient to sit on bedside commode or toilet seat, making sure gown and robe are out of way.

    NOTE: Encourage patient to use handrails in bathroom.

15. Place bath blanket over lap for warmth, if needed.
16. Provide call light and toilet tissue.
17. Provide privacy.
18. Return after appropriate time to check on patient or answer call light promptly.
19. Assist patient with toilet tissue, if necessary, using strokes from front to back.

    NOTE: Put on gloves first.

20. Assist patient with soap and water cleaning if indicated.
21. Assist patient in getting up from toilet seat or bedside commode.
22. Assist patient with washing hands. Provide warm, wet washcloth.

    NOTE: Assist a patient who is able to wash hands at sink.

23. Assist patient in returning to bed.
24. Make patient comfortable and provide call light.
25. Wearing gloves, remove bedpan or receptacle from bedside commode.
26. Observe contents, measure urinary output, if necessary, and collect any specimen indicated.
27. Empty contents into toilet stool and flush stool.
28. Rinse bedpan or receptacle with cold water first and clean thoroughly.
29. Return bedpan or receptacle to bedside commode.
30. Remove gloves and wash hands.

Evaluation

31. Evaluate using the following criteria:

    a. Patient accomplished transfer to bedside commode or bathroom without difficulty.

    b. Patient was able to use bathroom or bedside commode.

    c. Elimination was not unusual in any manner.

    d. Perineal area was cleaned and dried.

    e. Perineal area shows no sign of redness or skin breakdown.

Documentation

32. Document:

    a. According to agency policy.

    b. Any difficulty in transfer procedure.

    c. Record urine on intake and output sheet as necessary.

    d. Describe any unusual characteristics.

    e. Any complaints of patient.

BASIC SKILLS

PROVIDE URINARY CARE

IX

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Following written instructions

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Collecting/recording data
- Making measurements

SCIENCE SKILLS

- Using scientific instruments (calibrated container)
- Collecting specimens

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions

- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet and Assignment Sheet 1.

JOB SHEET 3

PROVIDE URINARY CARE

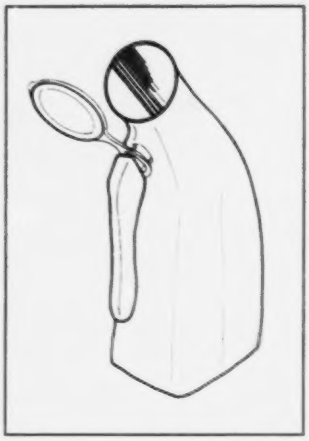
OBJECTIVE 25c

Assist a patient with a urinal.

INTRODUCTION

When male patients are unable to get out of bed, they may use a urinal for urination. Some may also use a urinal to stand at the bedside for voiding when they are unable to walk to the bathroom. Many men will only need to have the urinal within reach and have it emptied after voiding. The nurse must be prepared to assist when necessary.

FIGURE 23 Urinal



EQUIPMENT AND SUPPLIES

- Urinal
- Slippers, if patient will stand

PROCEDURE

Assessment and Analysis

1. Determine amount of assistance needed by patient.

2. Note any medical or nursing diagnoses which would alter procedure.

1200

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (calibrated container)
- Collect specimens

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

Planning

3. Obtain urinal.

4. Explain procedure to patient.

5. Provide privacy.

6. Don gloves.

Implementation

7. For patient who will remain in bed:

    a. Push covers to side without exposing patient more than necessary.

    b. Separate patient's legs enough to place urinal.

    c. Place penis into the urinal.

    d. Replace covers.

    e. Provide patient with call light.

    f. Check on patient after appropriate period of time or answer call light promptly.

8. For patient who will stand at bedside:

    a. Place bed at lowest level.

    b. Elevate head of bed to assist in sitting up.

    c. Assist patient to sit on side of bed.

    d. Assist patient with slippers.

    e. Assist patient to stand.

    f. Assist in positioning urinal for voiding.

    g. Assist patient in standing and holding urinal as necessary.

    h. Help back into bed and replace covers.

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with clients/customers/patients

9. Observe contents of urinal, measure if output records are being kept, collect urine specimen, if necessary.

10. Empty urinal.

11. Rinse urinal with cold water.

12. Return to storage area.

    NOTE: Men who do not require assistance will frequently like to keep the urinal within reach, often hooking it over a portion of the siderail. Do not place the urinal on the overbed table. Empty urinals promptly after use.

13. Remove gloves and wash hands.

14. Make patient comfortable.

Evaluation

15. Evaluate using the following criteria:

    a. Patient was able to use urinal successfully.

    b. None of the urine was spilled.

    c. Urine was not abnormal in any way.

Documentation

16. Document:

    a. According to agency policy.

    b. Any difficulty in voiding.

    c. Record urine on intake and output sheet as necessary.

    d. Describe any unusual characteristics.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (calibrated container)

— Collecting specimens

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet and Assignment Sheet 1.

JOB SHEET 4

PROVIDE URINARY CARE

IX

OBJECTIVE 25d

Empty a urinary drainage bag.

INTRODUCTION

When a urinary drainage bag attached to an indwelling catheter is used, care must be taken to avoid introducing pathogens. It is also important to obtain correct measurements to help monitor fluid balance. The drainage bag should be emptied at least every eight hours or more frequently if it is full or there are orders for output determinations at a more frequent interval.

EQUIPMENT AND SUPPLIES

- Calibrated container
- Gloves

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (calibrated container)
- Collect specimens

Assessment and Analysis

1. Note any orders concerning the frequency of output measurements.
2. Note nursing or medical diagnoses which would alter urine output.
3. Observe condition and position of catheter, drainage tubing, and drainage bag.
4. Observe amount, color, clarity, and odor of urine.

   NOTE: The *current* urine output color and clarity are assessed by observing the urine in the drainage *tubing*. As the urine collects, the color may appear different over time.

Planning

5. Wash hands.
6. Gather supplies.
7. Explain procedure to patient.
8. Put on gloves.

Implementation

9. Position calibrated container on floor below drainage tube from bag.

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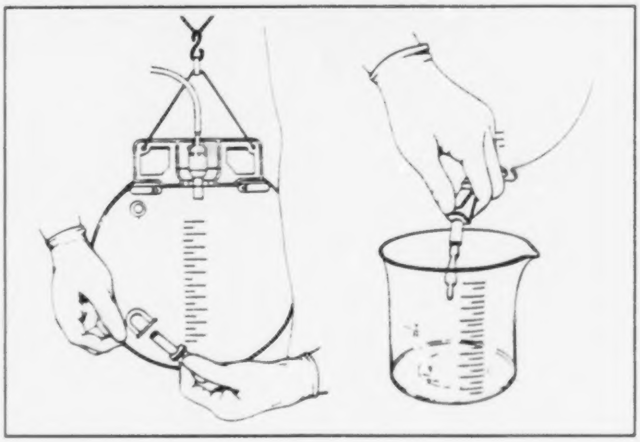
Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

10. Pull drainage tube from protective sleeve and release clamp, so that urine flows into calibrated container and tip of tubing does not touch inside of container or anything else.

FIGURE 24 Emptying a urinary drainage bag*



11. When urine has drained from bag completely, close clamp.
12. Replace drainage tubing into protective sleeve without touching anything.
13. Place calibrated container at eye level and on level surface to measure amount.
14. Empty calibrated container and rinse with cold water.
15. Return calibrated container to storage area

NOTE: There should be a separate calibrated container for each patient. Each container should be labeled with the patient's name.

16. Remove gloves and wash hands.
17. Record amount of urinary drainage.
18. Check position of catheter, drainage tube, and bag.
19. Make patient comfortable.

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply non-verbal communicacation
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

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Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/ patients

Evaluation

20. Evaluate according to the following criteria:

    a. Urine is clear yellow without clots, mucous shreds, pus, or sediment.

    b. Urine amount is adequate for collection interval.

    c. Odor of urine is characteristic.

    NOTE: The odor of urine which has been standing may be somewhat stronger than a freshly voided specimen.

    d. Drainage tubing and bag are free of collections of sediment.

    e. There is no leakage at any point in the system.

Documentation

21. Document:

    a. Urinary output in appropriate place.

    b. Any abnormal findings.

PROVIDE URINARY CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (calibrated container)

— Collecting specimens

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty using the calibrated container:
  - Review units of measure.
  - Demonstrate its use.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Assignment Sheet 1.

JOB SHEET 5

PROVIDE URINARY CARE

IX

OBJECTIVE 25e

Discontinue an indwelling catheter.

INTRODUCTION

When discontinuing an indwelling catheter, the balloon which has been keeping the catheter from sliding down the urethra must first be deflated. While the procedure is a simple one and should not cause discomfort, patients are frequently worried about it. Explain what will happen and reassure them that you will stop if they feel pain.

EQUIPMENT AND SUPPLIES

- Syringe

  NOTE: The syringe size depends on the capacity of the bag or balloon. The capacity is marked on the inflation port and must be checked before beginning the procedure. A 5 cc capacity is most commonly used. A needle is not usually needed. Check the construction of the catheter.

- Gloves
- Disposable underpad
- Tissue or washcloth
- Appropriate waste receptacle

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Assessment and Analysis

1. Check for any nursing or medical diagnoses which would indicate any difficulty with the procedure.
2. Observe amount, color, clarity, and odor of urine.

Planning

3. Wash hands.
4. Explain procedure to patient.
5. Check for size of balloon.
6. Obtain equipment.
7. Raise bed to comfortable working height.
8. Put on gloves.

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (syringe, calibrated containers)

9. Place disposable underpad under patient.

Implementation

10. Insert syringe into inflation port.

11. Pull back on plunger to withdraw all fluid or air which has been injected into balloon.

CAUTION!

URETHRAL TRAUMA POSSIBLE. Removing inflated balloon can cause severe trauma to urethra. DO NOT PULL ON CATHETER UNTIL BALLOON IS TOTALLY DEFLATED.

---

12. Check contents of syringe to be sure that all of balloon capacity has been removed.

CAUTION!

URETHRAL TRAUMA POSSIBLE. Removing inflated balloon can cause severe trauma to urethra. DRAW BACK ON PLUNGER UNTIL NO MORE FLUID OR AIR CAN BE WITHDRAWN.

---

13. Pinch off catheter to prevent leakage and gently withdraw catheter.

CAUTION!

URETHRAL TRAUMA POSSIBLE. Continuing to withdraw catheter when resistance is present can cause trauma to urethra. STOP AND TRY TO WITHDRAW MORE FLUID OR AIR FROM BALLOON.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

14. Examine catheter to see that balloon was completely deflated and intact.

15. Place catheter in appropriate waste receptacle.

16. Dry or clean perineal area as indicated.

17. Remove disposable underpad.

18. Return bed to lowest level.

19. Measure contents of drainage bag.

20. Dispose of catheter, drainage bag, and syringe in appropriate waste receptacle.

21. Remove gloves and wash hands.

22. Record amount of urine in drainage bag.

23. Make patient comfortable.

24. Instruct patient to drink generous amount of fluids if allowed and to save first voiding for measurement.

25. Provide urinal, bedpan, or specimen pan for bathroom.

Evaluation

26. Evaluate according to following criteria:

    a. Catheter was removed without difficulty or discomfort to patient.

    b. All parts of catheter were intact.

Documentation

27. Document:

    a. Urinary output in drainage bag.

    b. Condition of catheter.

    c. Any difficulty encountered.

d. Any complaints of patient.

e. Instructions given to patient.

PROVIDE URINARY CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (syringe, calibrated container)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job/task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty using the syringe:
  - Discuss the fact that syringes sometimes make patients nervous.
  - Demonstrate the proper use of the syringe.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1 and Assignment Sheet 1.

JOB SHEET 6

PROVIDE URINARY CARE

IX

OBJECTIVE 25f

Collect a clean catch/midstream urine specimen.

INTRODUCTION

The purpose of a clean catch/midstream specimen is to minimize contamination of the specimen by other body structures. If the procedure is not done correctly, this purpose is defeated. For that reason, patients confined to bed would probably be catheterized rather than attempting such a collection.

EQUIPMENT AND SUPPLIES

- Special clean catch kit **or**
    - Sterile specimen container
    - Sterile cotton balls and antiseptic solution or packaged antiseptic towelettes or swabs

- Label
- Requisition

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

General Science Skills
- Collect specimens/samples
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Determine patient's ability to assist with procedure.

Planning

2. Wash hands.
3. Obtain clean catch kit or assemble supplies.
4. Explain procedure to patient.

Implementation

5. Assist female patient to bathroom or bedside commode and male patient to bathroom or bedside with urinal.
6. Assist patient to wash hands.
7. Open kit or prepare supplies.
    a. Pour antiseptic over cotton balls or open packet(s) containing towelettes or swabs.
    b. Open container and place lid flat side down. Do not touch inside of container or lid.

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients

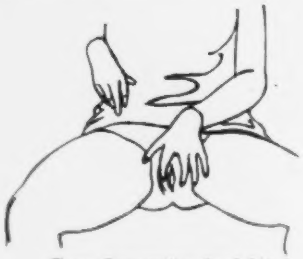
8. For female patient

   a. Instruct the patient to sit on toilet stool or bedside commode with legs spread apart.

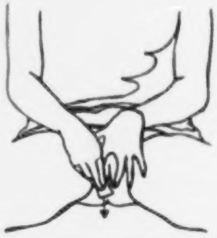
   b. Have patient separate labia and keep them separated until collection is complete.

   c. Clean labia with cotton balls, towelettes, or swabs, using strokes from front to back and separate cotton ball, towelette, or swab for each stroke.

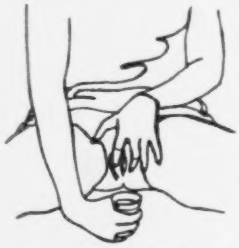
FIGURE 25 Female collection*



Top: Separating the labia



Middle: Wiping top to bottom



Bottom: Urinating into a specimen cup

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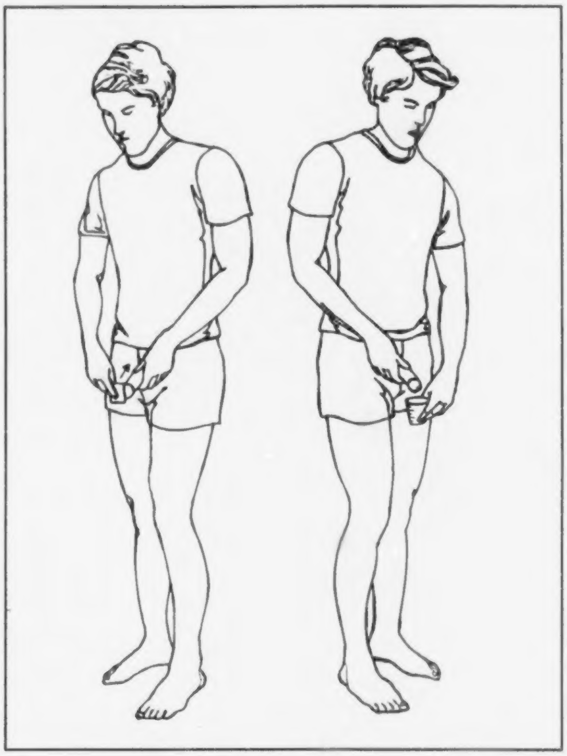
*Reprinted with permission from *Nursing Photobook: Implementing Urological Procedures*. ©1982 Springhouse Corporation. All rights reserved.

9. For male:

    a. Instruct male patient to stand to void.
    b. The uncircumcised patient should retract the foreskin.
    c. Have patient hold penis with non-dominant hand until completion of procedure.
    d. Clean the area around the urethra with antiseptic moistened cotton ball, towelette, or swab.

FIGURE 26 Male collection* Left: Using a swab to clean around the urethral opening, wiping toward the body. Right: Urinating into a specimen cup.



10. Instruct patient to begin voiding into toilet stool, bedside commode, or urinal.

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11. After stream is started, instruct patient to stop stream and place cup to catch urine without touching inside of cup or touching cup itself to perineal area or penis. Do not fill cup completely.

    NOTE: Patients may have difficulty stopping stream.

12. Have patient complete voiding into toilet stool.

13. Place lid on specimen container, taking care not to touch inside of lid or inside of container.

14. Assist patient with gown or clothing as necessary.

15. Assist patient to wash hands.

16. Make patient comfortable.

17. Attach label to specimen container.

18. Place labeled container inside plastic bag for transportation to lab and attach requisition.

19. Wash hands.

20. Take or send specimen to lab immediately.

Evaluation

21. Evaluate according to following criteria:

    a. Patient was able to obtain specimen without contamination.

    b. Urine was clear yellow without unusual odor.

    c. Patient experienced no difficulty in voiding.

Documentation

22. Document:

    a. Time of collection.

    b. Type of test ordered.

c. Any abnormal amount, appearance, or odor of urine.

d. Any difficulty encountered in collection of specimen.

e. Any complaints of patient.

f. Transportation of urine to laboratory.

PROVIDE URINARY CARE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Refer to Instructional Supplement for Job Sheet 4.

JOB SHEET 7

PROVIDE URINARY CARE

IX

OBJECTIVE 25g

Collect a 24 hour/cumulative specimen.

INTRODUCTION

When a cumulative urine specimen is being collected, the nurse must take steps to assure that the entire amount of urine for the specified time period is collected. If a portion of the specimen is discarded, the entire collection may have to be started again. This wastes time.

Another consideration is preservation of the specimen. It must be kept cold and a preservative may be added. If the urine is allowed to deteriorate, the specimen will not be as useful.

EQUIPMENT AND SUPPLIES

- Container large enough to hold specimen for entire period specified

  NOTE: Check with lab to see if a preservative such as formaldehyde needs to be added.

- Bedpan, urinal or specimen pan
- Container to hold ice and collection bottles

  NOTE: This is not necessary if specimen will be stored in refrigerator.

- Gloves
- Label
- Requisition
- Calibrated container (Optional—Needed if patient is on Intake and Output)

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Assess patient's ability to cooperate in obtaining specimen.

2. Note any medical or nursing diagnoses which would alter procedure.

3. Note any special requirements for fluid restriction or intake which may be required for some tests.

Planning

4. Obtain container for urine.

Math Application and Display Skills
- Use English & metric measures

Data Analysis and Display Skills
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (calibrated container)
- Collect specimens/samples

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

5. Prepare ice containers, if urine will not be refrigerated.

   NOTE: A bath basin may be used.

6. Explain procedure to patient.

7. Post signs to remind all personnel of collection procedure.

Implementation

8. Have patient void at designated starting time and **discard** this specimen.

9. When patient voids again, pour urine into collection container.

10. Continue to collect all urine voided during specified time period.

11. Refill ice container as needed during collection period.

12. At end of designated time, have patient void and **save** urine as a part of the collection.

13. Attach label and requisition and send urine to lab promptly.

Evaluation

14. Evaluate according to following criteria:

    a. All urine during specified time period was saved.

    b. No abnormalities in amount, color, clarity, or odor were noted.

Documentation

15. Document:

    a. Time collection was begun and ended.

    b. Type of test.

    c. Output as indicated.

    d. Observations of urine.

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Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients

e. Reaction of patient.

f. Any difficulty encountered.

g. Transportation of urine specimen to laboratory.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 7

Refer to Instructional Supplement for Job Sheet 4.

JOB SHEET 8

PROVIDE URINARY CARE

IX

OBJECTIVE 25h

Perform urine testing using reagent paper.

INTRODUCTION

There are many types of urine tests that are performed with reagent paper. Protein, glucose, acetone and pH are among the components tested in this way. Frequently, the nurse will need to do some of this testing and even teach patients to perform their own testing.

This type of testing relies on color changes which occur with chemical reactions of urine in contact with specially treated paper or "dip sticks" as they are commonly called. It is essential to follow the manufacturer's directions exactly and to compare the results to the color tables provided.

EQUIPMENT AND SUPPLIES

- Freshly voided urine
- Reagent paper
- Color chart

  NOTE: Most are on container in which paper is supplied.

- Directions for specific test

  NOTE: These also are usually on the container.

- Watch with second hand
- Gloves

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Observe urine for amount, color, clarity, and odor.

2. Note any medical or nursing diagnoses which would alter outcome of testing.

3. Observe condition of reagent paper to determine if there is any discoloration which would make results unreliable.

Planning

4. Read directions carefully.

5. Check container for expiration date.

6. Make sure lighting is adequate for interpreting results.

Math Application and Display Skills

- Use English & metric measures

Functional Math Skills

- Make measurements

General Science Skills

- Use scientific instruments (watch)
- Collect specimens/samples

Life Science Skills

- Investigate/apply principles of anatomy/physiology
- Investigate health issues

Listening Skills

- Apply active listening skills

Interactive Communication Skills

- Give/follow oral directions
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills

- Interact with clients/customers/patients

Leadership/Influencing Skills

- Obtain confidence in others
- Develop esteem in self/others

7. Put on gloves.

Implementation

8. Remove lid from container and place on counter with flat side down.

9. Remove a single reagent paper from container without touching colored portion of paper. Hold in hand without touching any surface.

10. Close lid of container immediately.

    NOTE: If moisture is allowed to come in contact with papers, results may be inaccurate.

11. Dip paper into urine and immediately remove.

12. Begin timing process.

13. As soon as time is up, compare results to color chart.

14. Dispose of reagent paper and urine appropriately.

15. Remove gloves and wash hands.

Evaluation

16. Evaluate according to following criteria:

    a. Results are within normal limits.

    b. Urine specimen is not abnormal in any way.

Documentation

17. Document:

    a. According to agency policy.

       NOTE: Hospitals often have special flow sheets for recording such results when they are done on a frequent basis.

    b. Record any abnormalities noted in observing urine.

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 8

Refer to Instructional Supplement for Job Sheet 4.

PRACTICAL TEST 1

PROVIDE URINARY CARE

IX

JOB SHEET 1

Assist a patient with a bedpan or fracture pan.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's ability to assist with procedure.	_____	_____
2. Noted any nursing or medical diagnoses which would alter procedure.	_____	_____
3. Determined the bedpan that should be used.	_____	_____
4. Enlisted the aid of an assistant, if needed.	_____	_____
5. Warm bedpan.	_____	_____
6. Explained procedure to patient.	_____	_____
7. Provided privacy.	_____	_____
8. Raised bed to comfortable working height.	_____	_____
9. Placed patient in supine position with head of bed flat, if not contra-indicated.	_____	_____

	YES	NO
10. Folded the top linens and gown out of the way without exposing the patient.	____	____
11. For patient who could assist:		
a. Instructed patient to flex knees and push against mattress with feet to raise buttocks.	____	____
b. Slid hand under lumbar area to assist patient in raising buttocks.	____	____
c. Placed disposable underpad, if desired.	____	____
d. Slid bedpan into position.	____	____
12. For patient who could not assist:		
a. Turned patient to side.	____	____
b. Placed disposable underpad if desired.	____	____
c. Placed bedpan in position against buttocks.	____	____
d. Turned patient back onto bedpan.	____	____
13. Checked patient for correct position on bedpan.	____	____
14. Repositioned linen.	____	____
15. Raised head of bed, if not contraindicated.	____	____
16. Provided patient with toilet paper and the call light.	____	____
17. Washed hands and provided privacy for the patient.	____	____

	YES	NO
18. Checked on patient after appropriate time or answered call light promptly.	____	____
19. Donned gloves.	____	____
20. If patient could assist:		
a. Instructed patient to flex knees and press feet against bed to raise buttocks.	____	____
b. Slide bedpan from beneath patient, being careful not to spill contents.	____	____
21. If patient could not assist:		
a. Assisted patient to turn to side off of bedpan while holding bedpan level.	____	____
b. Removed bedpan.	____	____
22. Wiped area with toilet tissue if patient could not do so, wiping from front to back.	____	____
23. Washed and dried area if indicated.	____	____
24. Removed disposable underpad if one was used.	____	____
25. Observed contents of bedpan, measuring urine if patient is on intake and output.	____	____
26. Emptied bedpan or collected specimen if needed.	____	____
27. Rinsed bedpan with cold water and cleansed thoroughly.	____	____
28. Returned bedpan to storage place.	____	____
29. Removed gloves and washed hands.	____	____
30. Provided patient with warm, wet washcloth or basin of water to wash hands.	____	____

	YES	NO
31. Positioned patient comfortably with bed at lowest level and call light in place.		
32. Washed hands.		
33. Evaluated according to established criteria.		
34. Documented appropriately.		

EVALUATORS COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Procedure was accomplished with a minimum of discomfort to patient.	4	3	2	1
Patient was properly positioned	4	3	2	1
Used proper equipment.	4	3	2	1
Performed steps in a timely manner.	4	3	2	1
Practiced safety rules throughout procedure.	4	3	2	1
Used universal precautions throughout procedure.	4	3	2	1
Provided satisfactory responses to questions asked.	4	3	2	1

EVALUATORS COMMENTS

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AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 2

PROVIDE URINARY CARE

IX

JOB SHEET 2

Assist patient to the bathroom or bedside commode.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's ability to ambulate.	_____	_____
2. Determined patient's need for assistance.	_____	_____
3. Noted any medical or nursing diagnoses which would contraindicate or complicate procedure.	_____	_____
4. Explained procedure to patient.	_____	_____
5. Obtained slippers and robe, if desired.	_____	_____
6. Provided privacy.	_____	_____
7. Positioned bedside commode conveniently with wheels locked.	_____	_____
8. Removed all obstacles from area of commode or path to bathroom.	_____	_____
9. Placed bed at lowest position.	_____	_____

	YES	NO
10. Elevated head of bed to assist in getting up.	____	____
11. Assisted patient to sitting position at side of bed.	____	____
12. Assisted patient in putting on slippers and robe, if desired.	____	____
13. Assisted to stand and pivot to bedside commode or assisted to walk to bathroom.	____	____
14. Assisted patient to sit on bedside commode or toilet seat, making sure gown and robe were out of way.	____	____
15. Placed bath blanket over lap for warmth, if needed.	____	____
16. Provided call light and toilet tissue.	____	____
17. Provided privacy.	____	____
18. Checked on patient after appropriate time or answered call light promptly.	____	____
19. Assisted patient with toilet tissue, if necessary, using strokes from front to back.	____	____
20. Assisted patient with soap and water cleaning, if indicated.	____	____
21. Assisted patient in getting up from toilet seat or bedside commode.	____	____
22. Assisted patient with washing hands. Provided warm, wet washcloth.	____	____
23. Assisted patient in returning to bed.	____	____

	YES	NO
24. Made patient comfortable and provide call light.	____	____
25. Wore gloves to remove bedpan or receptacle from bedside commode.	____	____
26. Observed contents, measured urinary output, if necessary, collected any specimen indicated.	____	____
27. Emptied contents into toilet stool and flushed stool.	____	____
28. Rinsed bedpan or receptacle with cold water first and cleaned thoroughly.	____	____
29. Returned bedpan or receptacle to bedside commode.	____	____
30. Removed gloves and washed hands.	____	____
31. Evaluated according to established criteria.	____	____
32. Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Patient accomplished transfer to beside commode or bathroom without difficulty.	4	3	2	1
Patient was properly positioned.	4	3	2	1
Perineal area was cleaned and dried.	4	3	2	1
Provided adequate care for the patient.	4	3	2	1
Used proper equipment.	4	3	2	1
Performed steps in a timely manner.	4	3	2	1
Practiced safety rules throughout procedure.	4	3	2	1
Used universal precautions throughout procedure.	4	3	2	1
Provided satisfactory responses to questions asked.	4	3	2	1

EVALUATORS COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 3

PROVIDE URINARY CARE

IX

JOB SHEET 3

Assist patient with a urinal.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined amount of assistance needed by patient.	_____	_____
2. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
3. Obtained urinal.	_____	_____
4. Explained procedure to patient.	_____	_____
5. Provided privacy.	_____	_____
6. Donned gloves.	_____	_____
7. For patient who remained in bed:		
a. Pushed covers to side without exposing patient more than necessary.	_____	_____
b. Separated patient's legs enough to place urinal.	_____	_____
c. Placed penis into the urinal.	_____	_____

	YES	NO
d. Replaced covers.		
e. Provided patient with call light.		
f. Checked on patient after appropriate period of time or answered call light promptly.		
8. For patient who stood at bedside		
a. Placed bed at lowest level.		
b. Elevated head of bed to assist in sitting up.		
c. Assisted patient to sit on side of bed.		
d. Assisted patient with slippers.		
e. Assisted patient to stand.		
f. Assisted in positioning urinal for voiding.		
g. Assisted patient in standing and holding urinal as necessary.		
h. Helped back into bed and replaced covers.		
9. Observed contents of urinal, measured, if output records were being kept, collected urine specimen, if necessary.		
10. Emptied urinal.		
11. Rinsed urinal with cold water.		
12. Returned to storage area		
13. Removed gloves and washed hands.		
14. Made patient comfortable.		

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	YES	NO
15. Evaluated according to established criteria.	____	____
16. Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Patient was positioned correctly.	4	3	2	1
None of the urine was spilled.	4	3	2	1
Provided appropriate care for the patient.	4	3	2	1
Used proper equipment.	4	3	2	1
Performed steps in a timely manner.	4	3	2	1
Practiced safety rules throughout procedure.	4	3	2	1
Used universal precautions throughout procedure.	4	3	2	1
Provided satisfactory responses to questions asked.	4	3	2	1

EVALUATORS COMMENTS

____

____

____

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AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 4

PROVIDE URINARY CARE

IX

JOB SHEET 4

Empty a urinary drainage bag.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any orders concerning the frequency of output measurements.	____	____
2. Noted nursing or medical diagnoses which would alter urine output.	____	____
3. Observed condition and position of catheter, drainage tubing, and drainage bag.	____	____
4. Observed amount, color, clarity, and odor of urine.	____	____
5. Washed hands.	____	____
6. Gathered supplies.	____	____
7. Explained procedure to patient.	____	____
8. Put on gloves.	____	____
9. Positioned calibrated container on floor below drainage tube from bag.	____	____

	YES	NO
10. Pulled drainage tube from protective sleeve and released clamp, so that urine flowed into graduate and tip of tubing did not touch inside of graduate or anything else.	____	____
11. Closed clamp.	____	____
12. Replaced drainage tubing into protective sleeve without touching tip of tubing to anything.	____	____
13. Placed calibrated container at eye level and on level surface to measure amount.	____	____
14. Emptied calibrated container and rinsed with cold water.	____	____
15. Returned calibrated container to storage area. **NOTE:** There should be a separate calibrated container for each patient. Each container should be labeled with the patient's name.	____	____
16. Removed gloves and washed hands.	____	____
17. Recorded amount of urinary drainage.	____	____
18. Checked position of catheter, drainage tube and bag.	____	____
19. Made patient comfortable.	____	____
20. Evaluated according to established criteria.	____	____
21. Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Drainage tubing and bag are properly positioned	4	3	2	1
There is no leakage at any point in the system	4	3	2	1
Provided appropriate care for the patient	4	3	2	1
Used proper equipment	4	3	2	1
Performed steps in a timely manner	4	3	2	1
Practiced safety rules throughout procedure	4	3	2	1
Used universal precautions throughout procedure	4	3	2	1
Provided satisfactory responses to questions asked	4	3	2	1

EVALUATORS COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

______________ (Date)

______________ (Evaluator's Signature)

______________ (Evaluator's Position)

JOB SHEET 5

Discontinue an indwelling catheter.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for any nursing or medical diagnoses which would indicate any difficulty with the procedure.	_____	_____
2. Observed amount, color, clarity and odor of urine.	_____	_____
3. Washed hands.	_____	_____
4. Explained procedure to patient.	_____	_____
5. Checked for size of balloon.	_____	_____
6. Obtained equipment.	_____	_____
7. Raised bed to comfortable working height.	_____	_____
8. Put on gloves.	_____	_____
9. Placed disposable underpad under patient.	_____	_____

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	YES	NO
10. Inserted syringe into inflation port.	____	____
11. Pulled back on plunger to withdraw all fluid or air which had been injected into balloon.	____	____
12. Checked contents of syringe to be sure that all balloon capacity had been removed.	____	____
13. Pinched off catheter to prevent leakage and gently withdrew catheter.	____	____
14. Examined catheter to see that balloon was completely deflated and intact.	____	____
15. Placed catheter in appropriate waste receptacle.	____	____
16. Dried or cleaned perineal area as indicated.	____	____
17. Removed disposable underpad.	____	____
18. Returned bed to lowest level.	____	____
19. Measured contents of drainage bag.	____	____
20. Disposed of catheter and drainage bag and syringe in appropriate waste receptacle.	____	____
21. Removed gloves and washed hands.	____	____
22. Recorded amount of urine in drainage bag.	____	____
23. Made patient comfortable.	____	____

	YES	NO
24. Instructed patient to drink generous amounts of fluids if allowed and to save first voiding for measurement.		
25. Provided urinal, bedpan, or specimen pan for bathroom.		
26. Evaluated according to established criteria.		
27. Documented appropriately.		

EVALUATORS COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Catheter was removed without difficulty or discomfort to patient	4	3	2	1
All parts of catheter were intact.	4	3	2	1
Provided appropriate care for the patient.	4	3	2	1
Used proper equipment.	4	3	2	1
Performed steps in a timely manner.	4	3	2	1
Practiced safety rules throughout procedure.	4	3	2	1
Used universal precautions throughout procedure.	4	3	2	1
Provided satisfactory responses to questions asked.	4	3	2	1

EVALUATORS COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.

3 — Moderately skilled — Has performed job during training program; limited additional training may be required.

2 — Limited skill — Has performed job during training program; additional training is required to develop skill.

1 — Unskilled — Is familiar with process, but is unable to perform job.

____
(Date)

____
(Evaluator's Signature)

____
(Evaluator's Position)

PRACTICAL TEST 6

PROVIDE URINARY CARE

IX

JOB SHEET 6

Collect a clean catch/midstream urine specimen.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's ability to assist with procedure.	_____	_____
2. Washed hands.	_____	_____
3. Obtained clean catch kit or assembled supplies.	_____	_____
4. Explained procedure to patient.	_____	_____
5. Assisted female patient to bathroom or bedside commode and male patient to bathroom or bedside with urinal.	_____	_____
6. Assisted patient to wash hands.	_____	_____
7. Opened kit or prepared supplies.	_____	_____
a. Poured antiseptic over cotton balls or open packet(s) containing towelettes or swabs.	_____	_____

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	YES	NO
b. Opened container and placed lid flat side down without touching inside of container or lid.		
8. For female patient		
a. Instructed the patient to sit on toilet stool or bedside commode with legs spread apart.		
b. Had patient separate labia and keep them separated until collection was complete.		
c. Cleaned labia with cotton balls, towelettes, or swabs, using strokes from front to back and a separate cotton ball, towelette, or swab for each stroke.		
9. For male		
a. Instructed male patient to stand to void.		
b. Had uncircumcised patient retract foreskin.		
c. Had patient hold penis with non-dominant hand until completion of procedure.		
d. Cleaned the area around the urethra with antiseptic moistened cotton ball, towelette, or swab.		
10. Had patient begin voiding into toilet stool, bedside commode or urinal.		

	YES	NO
11. After stream was started, instructed patient to stop stream and place cup to catch urine without touching inside of cup or touching cup itself to perineal area or penis.	____	____
12. Had patient complete voiding into toilet stool.	____	____
13. Placed lid on specimen container, taking care not to touch inside of lid or inside of container.	____	____
14. Assisted patient with gown or clothing, as necessary.	____	____
15. Assisted patient to wash hands.	____	____
16. Made patient comfortable.	____	____
17. Attached label to specimen container.	____	____
18. Placed labeled container inside plastic bag for transportation to lab and attached requisition.	____	____
19. Washed hands.	____	____
20. Took or sent specimen to lab immediately.	____	____
21. Evaluated according to established criteria.	____	____
22. Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Provided clear instructions.	4	3	2	1
Patient was able to obtain specimen without contamination.	4	3	2	1
Provided appropriate care for the patient.	4	3	2	1
Used proper equipment.	4	3	2	1
Performed steps in a timely manner.	4	3	2	1
Practiced safety rules throughout procedure.	4	3	2	1
Used universal precautions throughout procedure.	4	3	2	1
Provided satisfactory responses to questions asked.	4	3	2	1

EVALUATORS COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 7

PROVIDE URINARY CARE

IX

JOB SHEET 7

Collect a 24 hour/cumulative specimen.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed patient's ability to cooperate in obtaining specimen.	____	____
2. Noted any medical or nursing diagnoses which would alter procedure.	____	____
3. Noted any special requirements for fluid restriction or intake which may be required for some tests.	____	____
4. Obtained container for urine.	____	____
5. Prepared ice containers, if urine would not be refrigerated.	____	____
6. Explained procedure to patient.	____	____
7. Posted signs to remind all personnel of collection procedure.	____	____
8. Had patient void at designated starting time and *discarded* specimen.	____	____

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	YES	NO
9. When patient voided again, poured urine into collection container.	_____	_____
10. Continued to collect all urine voided during specified time period.	_____	_____
11. Refilled ice container as needed during collection period.	_____	_____
12. At end of designated time, had patient void and *saved* urine as a part of the collection.	_____	_____
13. Attached label and requisition and sent urine to lab promptly.	_____	_____
14. Evaluated according to established criteria.	_____	_____
15. Documented appropriately.	_____	_____

EVALUATORS COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Provided clear instructions to patient.	4	3	2	1
Discarded first voiding.	4	3	2	1
All urine during specified time period was saved	4	3	2	1
Provided appropriate care for the patient	4	3	2	1
Used proper equipment	4	3	2	1
Performed steps in a timely manner	4	3	2	1
Practiced safety rules throughout procedure	4	3	2	1
Used universal precautions throughout procedure	4	3	2	1
Provided satisfactory responses to questions asked	4	3	2	1

EVALUATORS COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 8

PROVIDE URINARY CARE

IX

JOB SHEET 8

Perform urine testing using a reagent paper.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Observed urine for amount, color, clarity, and odor.	_____	_____
2. Noted any medical or nursing diagnoses which would alter outcome of testing.	_____	_____
3. Observed condition of reagent paper to determine if there was any discoloration which would make results unreliable.	_____	_____
4. Read directions carefully.	_____	_____
5. Checked container for expiration date.	_____	_____
6. Made sure lighting was adequate for interpreting results.	_____	_____
7. Put on gloves.	_____	_____

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		YES	NO
8.	Removed lid from container and placed on counter with flat side down.	____	____
9.	Removed a single reagent paper from container without touching colored portion of paper. Hold in hand without touching any surface.	____	____
10.	Closed lid of container immediately.	____	____
11.	Dipped paper into urine and immediately removed.	____	____
12.	Began timing process.	____	____
13.	As soon as time was up, compared results to color chart.	____	____
14.	Disposed of reagent paper and urine appropriately.	____	____
15.	Removed gloves and wash hands.	____	____
16.	Evaluated according to established criteria.	____	____
17.	Documented appropriately.	____	____

EVALUATORS COMMENTS ____

____

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PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criteria must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Followed directions correctly.	4	3	2	1
Interpreted results correctly.	4	3	2	1
Provided appropriate care for the patient.	4	3	2	1
Used proper equipment.	4	3	2	1
Performed steps in a timely manner.	4	3	2	1
Practiced safety rules throughout procedure.	4	3	2	1
Used universal precautions throughout procedure.	4	3	2	1
Provided satisfactory responses to questions asked.	4	3	2	1

EVALUATORS COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

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3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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WRITTEN TEST

PROVIDE URINARY CARE

IX

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with assessment of the urinary system and fluid balance to their definitions. Write the correct letter in the blank.

Part 1

______ 1. Accumulation of fluid within body tissue

______ 2. Pertaining to the kidney

______ 3. Painful or difficult urination

______ 4. Act of excreting urine

______ 5. Elasticity of skin related to fluid content

______ 6. Profuse perspiration

______ 7. Presence of acetone, a waste product of fat metabolism, in urine

______ 8. Loss of fluid from body tissue

a. Acetonuria

b. Dehydration

c. Diaphoresis

d. Dysuria

e. Edema

f. Renal

g. Turgor

h. Urination

Part 2

______ 1. Scanty urine output

______ 2. Weight of substance compared with water

______ 3. Urine left in the bladder after voiding

______ 4. Presence of protein in urine

______ 5. Abbreviation for urinary tract infection

a. Albuminuria

b. Distension

c. Micturition

d. Oliguria

e. Residual urine

f. Specific gravity

______6. Act of excreting urine from the body

______7. Condition of being inflated or swollen

______8. Feeling that bladder must be emptied immediately

g. Urgency

h. UTI

Part 3

______1. Medication to produce excretion of fluid

______2. Laboratory examination of urine

______3. Presence of ketone, a waste product of fat metabolism, in urine

______4. Excessive urine output

______5. Act of excreting urine

______6. Accumulation of fluid in the peritoneal cavity

______7. Instrument used to determine specific gravity

a. Ascites

b. Diuretic

c. Ketonuria

d. Polyuria

e. Refractometer

f. Urinalysis

g. Void

Part 4

______1. Generalized edema

______2. Presence of blood in urine

______3. Lateral portion of body between ribs and hip

______4. Presence of pus in urine

______5. Presence of sugar in urine

______6. Presence of protein in urine

______7. Absence of urinary output

a. Anasarca

b. Anuria

c. Flank

d. Glucosuria

e. Hematuria

f. Proteinuria

g. Pyuria

OBJECTIVE 2

Match terms associated with nursing interventions related to the urinary system to their definitions. Write the correct letter in the blank.

Part 1

_____ 1. Exercises to strengthen muscles of the pelvic floor

_____ 2. An external catheter: one that is attached to the penis rather than inserted through the urethra

_____ 3. A metric unit of volume measurement: 1/1000 of a liter

_____ 4. Vomiting

_____ 5. A portable chair-like receptacle used for elimination

_____ 6. Back flow of urine into kidneys

a. Beside commode

b. Condom catheter

c. Emesis

d. Kegel exercises

e. Milliliter

f. Reflux

Part 2

_____ 1. Administration of fluids by a route other than the digestive system

_____ 2. An indwelling catheter with three lumen suitable for continuous bladder irrigations

_____ 3. Measurement of liquids entering the body and leaving the body

_____ 4. Technique of having patient void twice to determine current chemical status of body

a. Catheter

b. Intake and output

c. Lumen

d. Parenteral fluids

e. Second-voided specimen

f. Supra-pubic catheter

g. Three-way Foley catheter

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______ 5. Channel or opening

______ 6. Catheter placed surgically through abdominal wall

______ 7. A tube inserted through the urethra into the bladder for urine drainage

Part 3

______ 1. Technique of determining presence of pathogenic organisms

______ 2. A metric unit of volume measurement, roughly equivalent to a quart

______ 3. Laboratory test to determine which antibiotic agent will be effective against a specific pathogen

______ 4. A catheter that remains in place in the bladder by inflation of a balloon

______ 5. A metric unit of volume measurement: equal to 1/1000 of a liter

______ 6. Device for frequent measurement of urine through an indwelling catheter

______ 7. Catheter that does not need to stay in place; used for obtaining urine from the bladder

a. Cubic centimeter
b. Culture
c. Foley catheter
d. Liter
e. Sensitivity
f. Straight catheter
g. Urine meter

OBJECTIVE 3 **List the four common urine assessments.**

1. ______________________________
2. ______________________________

3. ____

4. ____

OBJECTIVE 4

Choose the correct word or phrase to complete statements about normal and abnormal urine assessment data. Write the correct letter in the blank.

______1. Normal urine output for a 24 hour period is ___.

- a. 800-1200 cc
- b. 1000-1500 cc
- c. 1500-2000 cc
- d. 2000-2500 cc

______2. Dark yellow urine ___.

- a. can occur with dehydration
- b. indicates low concentration of substances
- c. is a medical emergency
- d. indicates gall bladder disease

______3. If pseudomonas organisms are present, the urine may be ___.

- a. brown
- b. orange
- c. green
- d. blue

______4. Medication can turn the urine ___.

- a. tea colored
- b. red
- c. light yellow
- d. orange

______5. The normal range of urine secretion is ___.

- a. 30-90 cc/hr
- b. 50-180 cc/hr
- c. 60-120 cc/hr
- d. 80-190 cc/hr

______6. Cloudy urine USUALLY indicates the presence of ___.

a. vitamins
b. medication
c. infection
d. dehydration

______7. Tea-colored urine indicates ___.

a. liver or gall bladder disease
b. a low concentration of dissolved substances
c. kidney stones
d. Pyridium

______8. Smoky urine is associated with ___.

a. pseudomonas organisms
b. infection
c. liver or gall bladder disease
d. kidney stones

______9. The normal color for urine is ___.

a. orange
b. straw
c. colorless
d. bright yellow

______10. The assessment for normal urine odor is ___.

a. characteristic odor
b. no odor
c. faint sweet odor
d. strong, pungent odor

OBJECTIVE 5

Select from a list true statements about urinalysis reports. Write an "X" in the blank before each true statement.

______1. Proteinuria, glucosuria, ketonuria, and hematuria are abnormal findings discovered with urinalysis.

______2. On a normal urinalysis report, few epithelial cells will be present.

_______3. White blood cells and a cloudy appearance will usually accompany pyuria.

_______4. Increased intake of meats will increase the alkalinity of urine.

_______5. More concentrated urine will have a lower specific gravity than less concentrated urine.

_______6. A normal urinalysis report will show a moderate to high level of white blood cells.

_______7. A urinalysis report is a combination of microscopic examination, chemical testing and patient responses to questions.

_______8. All laboratories are required to use the same numerical values for reporting test results.

_______9. Most urine will have a Ph of about 6.

______10. Increased intake of fruits, vegetables, and dairy products will increase the alkalinity of urine.

OBJECTIVE 6

Match characteristics of urinary elimination patterns with their descriptions. Write the correct letter in the blank.

_______1. Painful or difficult urination

_______2. Excretion of large amounts of urine

_______3. Inability to retain urine in the bladder

_______4. Scanty or small urine output

_______5. Awakening to void at night

_______6. Voiding at short intervals

_______7. Absence of urine output

a. Albuminuria

b. Anuria

c. Dehydration

d. Diaphoresis

e. Diuresis

f. Dysuria

g. Frequency

h. Hematuria

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______ 8. Failure of kidneys to secrete urine

______ 9. Inability to expel urine from the bladder

i. Incontinence
j. Ketonosis
k. Nocturia
l. Oliguria
m. Polyphagia
n. Pyuria
o. Retention
p. Suppression

OBJECTIVE 7

List factors that may inhibit a patient's ability to void.

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________

OBJECTIVE 8

Choose the correct word or phrase to complete statements about nursing interventions which promote urinary elimination. Write the correct letter in the blank.

______ 1. The first consideration in assisting patients to void is to ___.

a. provide a commode
b. provide privacy and sufficient time
c. make it clear that the patient must void
d. measure the output

______2. The intervention that is MOST LIKELY to promote urination is ___.

a. encouraging the patient to drink generous amounts of fluid
b. whispering encouragement while the patient is trying to void
c. placing the patient on the toilet at regular intervals
d. documenting each urination and comparing it to the last one

______3. When a patient has difficulty voiding, it would be appropriate for the nurse to ___.

a. Obtain an order for catheterization immediately
b. Withhold oral fluids until she voids
c. Have running water within hearing distance
d. Decrease the rate of IV fluids

______4. While both men and women can be helped to void by assuming a natural position, women may also be encouraged by ___.

a. massaging the breasts
b. massaging the abdominal area
c. squatting over a urinal placed on the floor
d. sitting backward on the toilet seat

______5. The nurse could help the patient void by ___.

a. Placing the bed in a supine position
b. Running cold water over the bedpan before placing it
c. Remaining with the patient trying to void
d. Placing the patient in a tub of warm water

OBJECTIVE 9

Match types of incontinence with their descriptions. Write the correct letter in the blank.

______1. Occurs when the bladder is not completely emptied	a. Anurial incontinence
______2. Associated with inappropriate contractions of the bladder	b. Functional incontinence

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______3. Related to an increase in intra-abdominal pressure

______4. May have a cause outside the urinary system

c. Overflow incontinence

d. Stress incontinence

e. Urge incontinence

f. Urinary incontinence

OBJECTIVE 10 **List causes of functional incontinence.**

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________

OBJECTIVE 11 **Choose the correct word or phrase to complete statements about common nursing interventions for the incontinent patient.** Write the correct letter in the blank.

______1. During bladder retraining ___.

a. Kegel exercises may help relax the patient
b. the patient is catheterized at regular intervals
c. fluids are restricted
d. prompted voiding is used

______2. The nurse should provide a barrier to protect the skin from the effects of urine. A good barrier is ___.

a. rubbing alcohol
b. povidone iodine
c. talcum powder
d. zinc oxide

______3. Surgical procedures are used to treat nonfunctional incontinence, exercises and bladder retraining can treat some types of incontinence, and control of a disease process will clear other types. Drugs are effective in treating ___.

a. stress incontinence
b. overflow incontinence
c. urge incontinence
d. all of the above

______4. The skin of an incontinent patient could best be protected by ___.

a. thorough washing and drying after urination
b. the use of disposable underpads
c. using powder
d. checking the patient at the end of each shift

OBJECTIVE 12

Distinguish among assessment data that may indicate fluid deficit or fluid overload. Write a "D" in the blank before each factor that indicates a deficit and an "O" in the blank before each factor that indicates an overload.

______1. Very light colored urine

______2. Edema

______3. Thirst

______4. Moist skin

______5. Low blood pressure

______6. Increased hematocrit

______7. Fatigue

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______8. Bounding pulse

______9. Weight loss

_____10. Sunken fontanel in infants

OBJECTIVE 13 **Describe normal intake and output measurements.**

____

____

____

____

OBJECTIVE 14 **List common intake and output sources.**

Intake sources

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________

Output sources

5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________

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OBJECTIVE 15

Choose the correct word or phrase to complete statements about recording intake and output. Write the correct letter in the blank.

______1. Wound suction devices are **usually** emptied ___.

a. every hour
b. every 4 hours
c. at the beginning of the shift
d. at the end of the shift

______2. When measuring output for a patient who has a Foley catheter, the nurse must remember to ___.

a. use a calibrated container to measure the urine
b. use the numbers on the bag for measuring
c. empty the drainage bag only once every 24 hours
d. empty the drainage bag only if there is a doctor's order

______3. The fluid that is **not** recorded on an intake and output sheet is ___.

a. urine
b. emesis
c. fluid from a wound drain
d. perspiration

______4. If output can't be measured, the nurse should estimate the amount, document it, and ___.

a. collect a sample of the output
b. describe the output
c. have the RN check the output
d. nothing more is required

______5. The statement that best describes the monitoring of intake for a patient is ___.

a. only the IV fluid is counted as intake
b. patients must receive solid food before intake can be measured
c. only the clear liquid oral intake is counted as intake
d. all IV and all oral liquid intake are counted as intake

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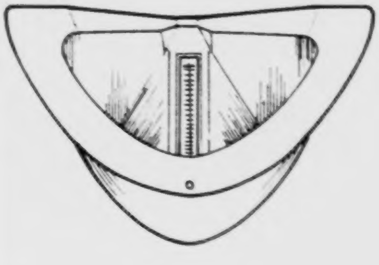
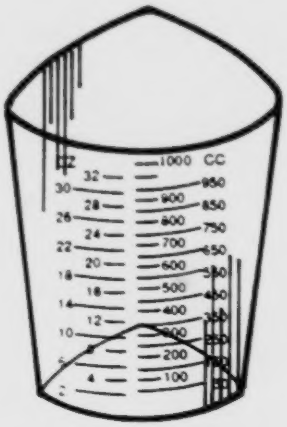
OBJECTIVE 16

Identify containers used to measure intake and output. Write the name in the blank.




OZ
32
30
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18
16
14
12
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650
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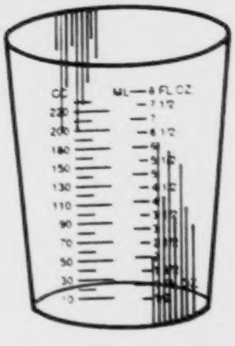
200
100

1. ______________________

2. ______________________


CC
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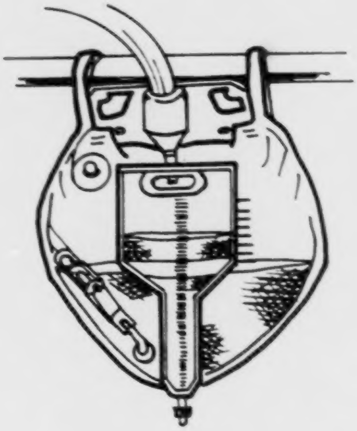
7 1/2
7
6 1/2
200
180
150
130
110
90
70
50
30
10



3. ______________________

4. ______________________

OBJECTIVE 17 **Convert common measurements used in calculating intake and output.** Write the correct letter in the blank.

______1. 1000 cc of fluid is equal to ___.

a. one ounce
b. one pint
c. one liter
d. one gallon

______2. If a patient drank 120 cc of juice, he would drink ___ml.

a. 40
b. 120
c. 360
d. 600

______3. If a patient drank a 12 oz. can of soft drink, he would drink ___.

a. 60 cc
b. 120 cc
c. 240 cc
d. 360 cc

______4. The nurse filled a 120 cc juice glass with ice chips. The patient ate one half of the ice chips. On the intake and output sheet the nurse should record ___.

a. 0
b. 30 cc
c. 60 cc
d. 120 cc

OBJECTIVE 18 **State the goals of nursing interventions for patients with catheters.**

1. ______________________________

2. ______________________________

OBJECTIVE 19

Choose the correct word or phrase to complete statements about catheter tubes, drainage bags and collection ports, and patient care. Write the correct letter in the blank.

______1. The drainage tubing of an indwelling catheter should be ___.

a. securely fastened to the siderails
b. coiled in the bed
c. detached from the catheter and drained every eight hours
d. irrigated daily with an antiseptic solution

______2. In order to prevent reflux of urine toward the bladder, the ___.

a. drainage tube should be clamped after voiding
b. drainage tubing should be level with the entry port on the bag
c. collection bag must be kept below the level of the bladder
d. collection bag must be kept level with the bladder

______3. A patient who has an indwelling catheter ___.

a. must remain in bed
b. should have fluids restricted
c. should have the catheter taped to the leg
d. must keep the drainage bag above the bladder

______4. When the patient is in bed, the drainage bag should be connected to the ___.

a. frame of the bed
b. side rails
c. patient's hospital gown
d. patient's body

______5. A great risk for a patient with an indwelling catheter is ___.

a. pain from the catheter
b. fluid deficit
c. urinary suppression
d. urinary tract infection

OBJECTIVE 20

Choose the correct word or phrase to complete statements about nursing care of the patient with a catheter. Write the correct letter in the blank.

______1. To prevent the growth of pathogenic organisms and the formation of sediment that can clog the catheter openings, the nurse should ___.

a. clamp the draining tube for 5 minutes every 4 hours
b. place the patient in semi-Fowler's position
c. encourage the patient to drink large quantities of fluids
d. assess the clarity of the urine often

______2. Periodic assessment of the urine of the patient with an indwelling catheter includes all of the following EXCEPT ___.

a. specific gravity
b. color and clarity
c. urine is flowing
d. drainage tube position

______3. The nurse should check the indwelling catheter to see that it is still intact and draining freely every ___.

a. 30 minutes
b. 2-3 hours
c. 4 hours
d. 8 hours

______4. When an indwelling catheter is used, the urinary meatus is kept clean with ___.

a. hydrogen peroxide
b. soap and water
c. wiping pads
d. alcohol

OBJECTIVE 21

Choose the correct word or phrase to complete statements about guidelines for collecting urine specimens. Write the correct letter in the blank.

______1. A sufficient amount of urine for most tests is ___.

a. 50 cc
b. 100 cc
c. 250 cc
d. 500 cc

______2. When a specimen is obtained from a patient with a Foley catheter, ___.

a. 100 cc are needed
b. the catheter should be clamped before collection
c. the drain at the bottom of the bag is used for collection
d. a culture and sensitivity will be done

______3. When a double-voided or second-voided specimen is needed, the interval between specimens is ___.

a. 10 minutes
b. 15 minutes
c. 30 minutes
d. 45 minutes

______4. When collecting a 24 -hour or cumulative urine specimen, ___.

a. the last specimen is discarded
b. a sterile receptacle is used
c. the urine must be kept cold
d. the urine must be strained

______5. For patients with renal calculi, the nurse must ___.

a. strain the urine
b. limit the amount of fluid intake
c. use a catheter for obtaining specimens
d. keep the urine cold for 2 hours before the analysis

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______6. When collecting a clean catch/midstream specimen, a sterile container is used, the external genitalia are cleansed, and ___.

a. the entire voiding is included for the analysis
b. a second specimen is taken 15 minutes later
c. voiding is begun in the toilet
d. catheterization is required

______7. A sterile urine specimen is obtained by ___.

a. asking the patient to void into a sterile bedpan
b. having the patient void directly into a specimen cup
c. cleansing the external genitalia before having the patient void
d. using a catheter to obtain the specimen

OBJECTIVE 22

Select from a list ways to adapt the collection of urine specimens to meet the needs of various age groups. Write an "X" in the blank before each correct statement.

______1. Dry cotton balls can be placed inside a diaper to collect small amounts of infant urine.

______2. Elderly patients may have trouble hearing instructions.

______3. If a sign is attached to a patient indicating that a 24-hour collecting is taking place, the nurse can be reprimanded for embarrassing the patient.

______4. If an elderly patient has trouble seeing and handling the equipment for a clean catch specimen, the nurse may ask that the doctor change the orders.

______5. On a female infant, the adhesive-backed bag should be placed over both the genital and rectal areas.

______6. On a male infant, the nurse should place both the penis and the scrotum in the collection bag.

______7. The major problem with elderly patients is that they don't want to cooperate.

______8. The easiest way to collect a specimen from a 3 year old is to put her up on the toilet and hold the cup.

______ 9. When only a few drops of urine are needed from an infant, the nurse can squeeze the diaper and withdraw the specimen with a syringe without the needle attached.

NOTICE

The following assignment sheets and job sheets are not part of the Written Test. If they have not been completed, check with your instructor.

OBJECTIVE 23 **Assess the urinary system and fluid balance.** SCORE ______

OBJECTIVE 24 **Calculate intake and output.** SCORE ______

OBJECTIVE 25 **Demonstrate the ability to:**

a. **Assist a patient with a bedpan or fracture pan.** RATING ______

b. **Assist patient to the bathroom or bedside commode.** RATING ______

c. **Assist patient with a urinal.** RATING ______

d. **Empty a urinary drainage bag.** RATING ______

e. **Discontinue an indwelling catheter.** RATING ______

f. **Collect a clean catch/midstream urine specimen.** RATING ______

g. **Collect a 24 hour/cumulative specimen.** RATING ______

h. **Perform urine testing using reagent paper.** RATING ______

OBJECTIVE 1

Part 1

1. e
2. f
3. d
4. h
5. g
6. c
7. a
8. b

Part 2

1. d
2. f
3. e
4. a
5. h
6. c
7. b
8. g

Part 3

1. b
2. f
3. c
4. d
5. g
6. a
7. e

Part 4

1. a
2. e
3. c
4. g
5. d
6. f
7. b

OBJECTIVE 2

Part 1

1. d
2. b
3. e
4. c
5. a
6. f

Part 2

1. d
2. g
3. b
4. e
5. c
6. f
7. a

Part 3

1. b
2. d
3. e
4. c
5. a
6. g
7. f

OBJECTIVE 3

- Amount
- Color
- Clarity
- Odor

OBJECTIVE 4

1. b
2. a
3. c
4. d
5. c
6. c
7. a
8. d
9. b
10. a

OBJECTIVE 5

1, 2, 3, 9, 10

OBJECTIVE 6

1. f
2. e
3. i
4. l
5. k
6. g
7. b
8. p
9. o

OBJECTIVE 7

- A stricture of the urethra
- The effects of anesthetic after surgery
- Swelling after childbirth or surgical procedures involving the genitourinary structures
- Medications such as atropine, antihistamines and some anti-hypertensive medications
- The supine position
- Lack of privacy

OBJECTIVE 8

1. b
2. a
3. c
4. d
5. d

OBJECTIVE 9

1. c
2. e
3. d
4. b

OBJECTIVE 10

- Delirium or mental confusion
- Dehydration
- Restricted mobility
- Inflammation
- Infection of the urinary tract
- Fecal impaction
- Medications
- Polyuria

OBJECTIVE 11

1. d
2. d
3. c
4. a

OBJECTIVE 12

1. O
2. O
3. D
4. O
5. D
6. D
7. D
8. O
9. D
10. D

OBJECTIVE 13

Intake and output measurements should be roughly equal. Normal daily adult measurable fluid intake will usually fall between 1200 cc and 1500 cc. Normal adult urine output will usually fall between 1000cc and 1500 cc.

OBJECTIVE 14

Intake sources

- Oral liquids
- Tube feedings
- Parenteral fluids
- Irrigating fluids

Output sources

- Urine
- Emesis
- Drainage from tubes
- Fluid obtained from irrigations

OBJECTIVE 15

1. d
2. a
3. d
4. b
5. d

OBJECTIVE 16

1. Specimen pan
2. Calibrated container
3. Drinking glass
4. Urine meter

OBJECTIVE 17

1. c
2. b
3. d
4. b

OBJECTIVE 18

- Preventing infection
- Assuring proper functioning of the catheter

OBJECTIVE 19

1 b
2. c
3. c
4. a
5. d

OBJECTIVE 20

1. c
2. a
3. b
4. b

OBJECTIVE 21

1. a
2. b
3. c
4. c
5. a
6. c
7. d

OBJECTIVE 22

1, 2, 6, 9

OBJECTIVE 23

Refer to answers to Assignment Sheet 1.

OBJECTIVE 24

Refer to answers to Assignment Sheet 2.

OBJECTIVE 25

Refer to Practical Tests for Job Sheets 1-8.

OBJECTIVE SHEET

PROVIDE FOR BOWEL ELIMINATION

X

INTRODUCTION

Many people we deal with in health care settings have problems or concerns with bowel elimination. Even those with seemingly unrelated disorders may have to undergo treatments such as enemas as preparation for other procedures. Diarrhea and constipation are common problems which the nurse will see. Frequently, the nurse is in a position to teach patients healthier ways to maintain bowel elimination. The information in this unit will prepare the nurse to assist many patients in a variety of ways.

UNIT OBJECTIVE

After completing this unit, the student should be able to determine whether bowel elimination falls within normal limits, assist the patient to maintain healthy patterns of elimination, collect stool specimens and administer enemas.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with bowel elimination with their correct definitions.
2. Select the word or phrase that completes statements about assessment of feces.
3. Select true statements about normal bowel elimination patterns and assessment data that indicate changes in normal patterns.
4. Select from a list patients who are likely to experience difficulty with bowel elimination.
5. Choose nursing interventions to aid bowel elimination.
6. Choose nursing interventions for the patient with diarrhea or fecal incontinence.
7. Select appropriate guidelines for collection of stool specimens.
8. Differentiate between types of enemas and their uses.
9. Select ways to adapt collecting stool specimens and administering enemas for various stages in the life span.

10. Demonstrate the ability to:

    a. Collect a stool specimen. (Job Sheet 1)

    b. Check stool for occult blood. (Job Sheet 2)

    c. Administer a cleansing enema. (Job Sheet 3)

    d. Administer a retention enema. (Job Sheet 4)

    e. Administer a Harris flush/colonic irrigation. (Job Sheet 5)

    f. Remove a fecal impaction. (Job Sheet 6)

PROVIDE FOR BOWEL ELIMINATION

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
  - Assist students to conduct a chapter service project on elimination.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
  - Plan community or school health project that involves disseminating pamphlets about elimination.

DELIVERY

Objective 1

- Discuss terms dealing with bowel elimination.
- Devise games and/or crossword puzzles to reinforce terms.

Objective 2

- Discuss observations of feces.
- Obtain a chart picturing infant stools. Discuss the chart with students.

Objective 3

- Discuss patterns of bowel elimination.
- Show video, *Bowel Elimination: Guidelines for Nursing Care.*

Objective 4

- Discuss factors which may inhibit bowel elimination.

Objective 5

- Discuss nursing interventions to aid bowel elimination.
- Have students make posters to be used as visual aids for teaching patients helpful practices in maintaining bowel elimination patterns.

Objective 6

- Discuss nursing interventions for the patient with diarrhea or fecal incontinence.

Objective 7

- Discuss guidelines for collection of stool specimens.
- Refer students to Supplement 1.

Objective 8

- Discuss different types of enemas.
- Show video, *Cleansing Enema.*
- Have enema buckets, bags, and prepared enemas available.

Objective 9

- Discuss ways to adapt collecting stool specimens and administering enemas for different stages in the lifespan.

APPLICATION

Objective 10

- Discuss collection of a stool specimen.

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- Have students complete Job Sheet 1.
- Discuss checking stool for occult blood.
- Provide test kits to students in lab. Chocolate pudding makes a realistic looking specimen for practice.
- Have students complete Job Sheet 2.
- Discuss administration of cleansing enemas.
- Demonstrate procedure on mannikin.
- Have students return demonstration.
- Have students complete Job Sheet 3.
- Discuss administration of a retention enema.
- Demonstrate procedure on mannikin.
- Have students return demonstration.
- Have students complete Job Sheet 4.
- Discuss administration of a Harris flush/colonic irrigation.
- Demonstrate procedure on mannikin.
- Have students return demonstration.
- Have students complete Job Sheet 5.
- Discuss removal of a fecal impaction.
- Have students complete Job Sheet 6.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.

- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on job sheet activities if not previously completed.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual materials

- *Bowel Elimination: Guidelines for Nursing Care*, Medcom, Box 3225, Garden Grove, CA 92642.
- *Cleansing Enema*, Medcom, Box 3225, Garden Grove, CA 92642.

UNIT REFERENCES

- Hogan, Jean and Sheila A. Sorrentino. *Textbook for Long-Term Care Assistants*. St. Louis, Missouri, The C.V. Mosby Company, 1988.

- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures*, (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- *Performing GI Procedures*. Intermed Communications, Inc., Horsham, Pennsylvania, 1981.
- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques*. The C.V. Mosby Company, St. Louis, Missouri, 1986.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C.V. Mosby Company, St. Louis, Missouri, 1987.
- *Procedures*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1983.
- Sloan, Jamee Reid. *Practical Nursing-Volume 1*. Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.
- Timby, Barbara K. *Clinical Nursing Procedures*. J.B. Lippincott Company, Philadelphia, Pennsylvania, 1989.

INFORMATION SHEET

PROVIDE FOR BOWEL ELIMINATION

X

OBJECTIVE 1

Match terms associated with bowel elimination with their correct definitions.

- **Anthelmintic** — An agent used to treat parasitic worms
- **Anus** — The opening at the lower end of the gastrointestinal tract
- **Carminative** — An agent used to remove gas from the gastrointestinal tract
- **Colon** — The large intestine
- **Constipation** — Difficult defecation with hard, dry fecal material
- **Defecation** — The act of expelling stool
- **Diarrhea** — Frequent passage of watery stool
- **Enema** — Introduction of fluid into the colon
- **Feces** — Waste product of the gastrointestinal system
- **Fiber** — Plant food sources which provide bulk and stimulate peristalsis
- **Flatus** — Intestinal gas
- **Gastrocolic reflex** — Increase in peristalsis when food or fluid is consumed
- **Guaiac** — Test using specially treated paper to determine the presence of occult blood in the stool
- **Hemorrhoids** — Dilated veins around the anus
- **Impaction** — Mass of hard, dry feces which cannot be expelled
- **Laxative** — Medication used to stimulate bowel movement
- **Melena** — Black, tarry feces

- **Occult** — Hidden
- **Parasite** — An organism which lives on another organism and cannot exist alone
- **Peristalsis** — Rhythmic movement of the gastrointestinal system
- **Rectum** — Final portion of large intestine
- **Sphincter** — Circular muscle controlling an opening

  EXAMPLE: Anal sphincter
- **Stool** — Feces

OBJECTIVE 2

Select the word or phrase that completes statements about assessment of feces.

Observation of stool can give clues to the health of the gastrointestinal system. Feces consist of waste products which the body cannot use. About 75% of normal stool is water. The actual percentage of water varies with the amount of time the stool has remained in the large intestine.

Stool also contains dead bacteria, fat, bile pigments, undigested fiber (roughage), and cells shed from the mucous membrane lining the intestine. All of these constituents give stool its characteristic color, consistency, and odor. Changes in the normal contents will change the characteristics of stool. The nurse should consider amount, color, shape, consistency, odor and abnormal contents in assessing stool.

AMOUNT

The amount or volume of stool depends upon the amount of food eaten. Although there are some situations where it might be necessary to weigh stool to determine amounts, we commonly describe stool amounts as small, moderate, or large.

COLOR

Stool color can provide important information in assessing gastrointestinal difficulties. Normal adult stool is brown in color due to the bile pigments it contains. The infant's stool is yellow until the diet contains solid foods that change the color.

Black, tarry stool, called melena, indicates bleeding high in the digestive tract, such as from an ulcer. Blood that has been swallowed after a nose bleed or tonsillectomy could also account for such a stool. Medications and foods can affect the color of stool. For example, iron preparations may produce black stools. Dark green vegetables such as spinach cause stool to appear a dark greenish-black.

A yellow, clay-colored or white stool indicates a bile obstruction. Red indicates bleeding low in the gastrointestinal tract where hemorrhoids may be present. Eating beets can also produce the red color. A pale stool can be caused by malabsorption of fat. A green or orange stool can be caused by an intestinal infection.

SHAPE

The shape of stool will conform to the shape of the rectum, giving it a cylindrical appearance. Narrow, ribbon-like or rod-like stool would indicate rapid intestinal movements or a partial obstruction.

CONSISTENCY

While stool is expected to be formed, it should still be soft in consistency. Hardened stool indicates that it has less water than usual. It is more difficult to expel. Mushy stool or liquid stool contains greater amounts of water, indicating that it has passed through the intestine more quickly or that there is a problem with absorption.

ODOR

The characteristic odor of stool is produced by the action of bacteria in the intestine. When there are bacterial infections, the odor will increase. Foods will have some effect on the odor of stool.

ABNORMAL CONTENTS

While abnormal contents and foreign objects are not expected, the alert nurse will detect their presence. Mucus or pus may be observed when inflammatory conditions or infections are present. If a child swallows objects such as coins or large amounts of chewing gum, they will appear in the stool. Intestinal parasites or worms are sometimes visible. Undigested food, especially seeds and skins may be present.

OBJECTIVE 3 **Select true statements about normal bowel elimination patterns and assessment data that indicate changes in normal patterns.**

Patterns of bowel elimination vary with the individual. The nurse must determine the patient's usual pattern before making any judgements about patterns being observed.

Changes in diet, activity, medications or emotions can cause a change in normal elimination patterns. The nurse should take all these factors into account when assessing elimination patterns.

FREQUENCY

The normal adult may have one to three bowel movements per day or only two or three bowel movements per week. Infants have an increased frequency because intestinal motility is increased. Normal infants may have one to six per day. Breast-fed infants have more bowel movements than bottle-fed infants.

TIME

The gastrocolic reflex is usually responsible for the urge to defecate. This reflex refers to the increase in peristalsis when food or fluid is ingested. For most people this is strongest when the first food of the day is consumed, accounting for the fact that many people have morning bowel movements. This also explains why additional bowel movements may take place after eating.

FACTORS ACCOMPANYING EXPULSION OF STOOL

In addition to recording the time, the nurse should note a change in factors accompanying the expulsion of stool, such as the presence of flatus, difficulty in expelling stool, pain, or cramping.

CONSTIPATION

Constipation is a pattern of fewer than normal bowel movements. Constipated stool is hard and dry because it has remained in the colon for a longer period of time than normal and more water has been absorbed. Defecation of constipated stool is more difficult.

DIARRHEA

Diarrhea is a pattern of frequent, watery bowel movements. Diarrheal stools have passed through the colon more quickly without the opportunity for absorption of water. Abdominal cramping is often associated with diarrhea.

OBJECTIVE 4

Select from a list patients who are likely to experience difficulty with bowel elimination.

The nurse will frequently work with patients who have difficulty with defecating. An understanding of the factors causing the difficulty will be beneficial. Patients who are likely to experience difficulty are those who:

- **Are NPO** — Since the gastrocolic reflex is normally responsible for the urge to defecate, people who are not eating will not experience this reflex.
- **Lack bulk in their diet** — In addition to a lack of food, lack of bulk inhibits peristalsis and defecation.
- **Lack fluids in their diet** — Lack of fluids makes defecation more difficult. Loss of fluid by diaphoresis (heavy sweating), diuresis or vomiting can also affect defecation.
- **Are immobile** — Activity encourages peristalsis. Immobility does not encourage peristalsis and therefore limits defecation.
- **Are taking medications** — Medications such as morphine and codeine, slow peristalsis. Barium, which is used for some diagnostic procedures, can contribute to constipation if not passed from the colon.
- **Have reduced space for passage of stool** — When the space for passage of stool is limited as with pregnancy and the presence of abdominal tumors, there will be difficulty with defecation.
- **Use laxatives or enemas regularly** — Regular, repeated use of laxatives or enemas interferes with the normal functioning of the colon and will eventually cause difficulty with defecation.
- **Don't take time to defecate** — Ignoring the urge to defecate can lead to problems with normal elimination. Patients should

be taught to take the time for a bowel movement when the urge occurs.

- **Are stressed** — Emotions can affect defecation. Stress may decrease muscle contractions, which slows elimination, and stress may also have the opposite effect, resulting in increased peristalsis and diarrhea.
- **Are unable to sit or squat** — A sitting or squatting position encourages defecation. When this position cannot be assumed, there may be difficulty.
- **Have little or no privacy** — Most people want privacy for defecation. Lack of privacy discourages defecation.

OBJECTIVE 5

Choose nursing interventions to aid bowel elimination.

Constipation is a common complaint. Nurses may often institute measures to encourage defecation or teach patients to do so. Some patients will need help changing their lifestyles to prevent the problem.

- **Help patient maintain normal patterns**

  Since patterns of defecation are individual, the measures used should be aimed at preserving the person's normal patterns. The nurse should determine normal times for defecation and offer the bedpan or assistance to the bathroom or bedside commode at these times. Unless absolutely necessary, other activities should not interfere with the patient's normal pattern.

  In offering a time for defecation, the nurse should also assist the patient to a comfortable sitting position on a toilet stool, bedside commode, or bedpan, unless contraindicated by the patient's condition. Then the patient should have privacy for defecation.

- **Encourage a high fiber diet**

  Nurses should encourage patients to eat an adequate diet which includes fiber or bulk-forming foods such as whole grain cereal products and fresh fruits and vegetables. Since the gastrocolic reflex is strongest when the first food of the day is consumed, a reasonably large breakfast will be beneficial.

- **Encourage fluid intake**

  Along with an adequate amount of food, adequate fluid intake will help. Including fruit juice in the fluids will increase bulk. The natural sugar and pectin in fruit and juices form bulk to stimulate peristalsis. Warm fluids may also be helpful.

- **Encourage activity**

  Activity stimulates peristalsis. Patients should be encouraged to participate in the maximum amount of activity allowed. The person who is not ill should exercise in some fashion on a regular basis. Walking is an excellent activity for stimulating peristalsis.

  If the patient must be confined to bed, there are two exercises which may help with defecation. First, the patient should be instructed to contract the abdominal muscles while lying in a supine position. This position should be held for 10 seconds and repeated five to ten times. Second, the thigh muscles should be contracted and held for 10 seconds. This should also be repeated five to ten times.

- **Encourage patients to respond to the urge to defecate**

  Patients should be taught that delay causes absorption of more fluid, making the fecal mass more difficult to expel.

- **Encourage patients to express emotions in a healthy manner**

  If stress seems to be a factor, individuals should be encouraged to express their emotions in a healthy manner. Relaxation techniques may be appropriate, along with attention to time management and other techniques to relieve stress.

- **Encourage appropriate use of medications, laxatives, and enemas**

  Patients should be encouraged to use all medications only when necessary and especially to avoid laxatives and enemas as a regular practice. Stool softeners or bulk-forming preparations may be more appropriate than laxatives, which act by other means.

People who repeatedly experience problems with defecation should be encouraged to seek further medical evaluation. An obstruction, possibly malignant, could be the cause.

OBJECTIVE 6

Choose nursing interventions for the patient with diarrhea or fecal incontinence.

DIARRHEA

Diarrhea may be a symptom of some underlying problem or it may be the temporary response to medication, food, stress, or pathogenic organisms; or it may be a contradictory sign of a fecal impaction. The cause of the diarrhea should be identified and treated if possible, but there are some interventions for the symptom of diarrhea itself.

- **Limit diet**

  It is common practice to limit the diet to clear liquids until the stools decrease in number and the consistency improves. Light foods are then introduced. Fried foods, highly seasoned foods and foods with high fiber content should not be eaten. Extremes of hot or cold foods and fluids may increase peristalsis and aggravate diarrhea.

- **Avoid rectal stimulation**

  Any unnecessary stimulation of the anal sphincter should be avoided, including taking rectal temperatures.

- **Respond quickly**

  The patient suffering from diarrhea may have difficulty controlling defecation. The nurse should make every effort to assist the patient quickly to the bedpan, bathroom, or bedside commode. The patient may be very embarrassed if accidents occur.

- **Provide skin care**

  The fecal material can irritate the patient's skin and the skin may easily break down. The skin around the anus should be gently washed and patted dry to remove all traces of fecal material after each elimination.

Cleaning strokes should always be away from the urinary meatus to avoid contaminating this area with fecal material. A cream or ointment such as zinc oxide or petroleum jelly may be applied to the area around the anus to soothe and protect the skin.

- **Document stools**

  Fluid balance becomes threatened with the increased loss of fluid during diarrhea. The number of stools should be documented. In some cases, liquid stools will be measured using a calibrated container. The description should always include amount, color, consistency and odor.

FECAL INCONTINENCE

Fecal incontinence can be very upsetting. Soiling is usually obvious and thus unpleasant and embarrassing. The problem could occur with diarrhea and be temporary, after neurological damage as from a stroke or spinal cord injury, or could be permanent as a result of Alzheimer's disease or a similar condition.

- **Provide skin care**

  Skin care is a primary consideration. Along with the same measures used for a patient with diarrhea, the patient with decreased sensation or awareness should be checked frequently to see if soiling has occurred. Waterproof underpads and undergarments should be checked and changed often.

- **Encourage high fiber diet**

  The diet should include foods high in fiber so the stool will be formed. This will aid in control and management.

- **Observe for patterns**

  The nurse should determine if there is a pattern to the incontinence, such as after meals as would be expected with the gastrocolic reflex. The patient could be placed on the bedpan, bedside commode, or toilet stool at these times in an effort to prevent soiling.

- **Provide for bowel retraining**

  Bowel retraining programs may be instituted if sufficient nerve and muscle function are present. This involves setting a desired time for defecation and then administering a laxative suppository about 30 minutes prior to that time. Warm fluids or fruit juice might be given. The patient would then be positioned for defecation at the desired time. Stool softeners, an adequate diet with generous fluid and fiber intake, and exercise may all be a part of the retraining.

OBJECTIVE 7

Select appropriate guidelines for collection of stool specimens.

Sometimes a sample of stool must be collected for laboratory examination. Special procedures must be followed for certain types of examinations. The nurse must know of the type of testing ordered and special instructions that relate to that testing.

- **Receptacles**

  For most specimens a small, wax-coated container is needed. Two tongue blades are used to transfer a small quantity of stool from the collecting receptacle to the specimen container. The specimen should not be mixed with urine or water. This means that the toilet stool should not be used for the collection and the patient should be instructed to urinate first in another receptacle. A preservative may be required for some collections.

- **Quantity**

  In most cases, the nurse collects a quantity of stool equal to one to two tablespoons or about one inch in length. If the stool is liquid, 15-30 cc's should be collected. If any part of the stool contains blood or mucus or appears abnormal, that portion should be included in the specimen.

  Sometimes the entire stool is needed for examination. The bedpan is lined with plastic wrap that overlaps the edges. The corners of the wrap can then be gathered together, lifting the entire stool from the bedpan.

- **Cumulative specimens**

  Cumulative specimens may be ordered for examining such characteristics as fat content. Entire specimens are collected using the technique with plastic wrap. Each specimen is placed in a large container stored in a refrigerator. At the end of the designated collection time, the container with all the stools is sent to the laboratory.

- **Storage and transport**

  Stool should be transported to the lab promptly for examination. Some examinations must take place when the specimen is warm and before the stool dries. Agencies may have policies on storing stool if immediate examination is not possible. Care should be taken in handling the specimen to prevent contamination by bacteria in the stool.

- **Labeling and documentation**

  As with all specimens, the container should be labeled with the patient's name and requisitions fully completed. Collection of the specimen should be documented, indicating the time of collection, the type of examination requested, any unusual characteristics of the stool, and transportation or storage of the specimen.

OBJECTIVE 8

Differentiate between types of enemas and their uses.

An enema involves introducing fluid into the rectum through the anal sphincter. Probably the largest numbers of enemas are given for the purpose of expelling feces, but there are other indications for the use of enemas.

We can say that there are two broad categories of enemas, **irrigating** enemas and **retention** enemas. Irrigating enemas involve instilling 750 - 1000 cc of solution. We expect the solution to be expelled within a very short time of administration. A retention enema involves a much smaller amount of fluid, usually about 200 cc. We want these solutions to be retained in order to achieve the desired effect.

Within these two categories, enemas may be grouped by the effect the enema should produce.

Type	Purpose	Examples	Category
Cleansing	Remove feces from colon	- Soap solution - Normal saline - Tap water - Hypertonic saline	Irrigating
Carminative	Relief of flatus	- Milk & molasses (175-200 cc molasses and 175-200 cc warm milk) - 1-2-3 magnesium sulfate, glycerine, warm tap water)	Retention (most often)
Emollient	Soothe tissue	- Oil (mineral, olive or cottonseed) - Starch (liquid starch and water) **NOTE:** Water must reach the boiling point for starch to dissolve and then be allowed to cool before administration.	Retention
Anthelmintic	Destroy intestinal parasites		Usually retention
Medicated	Purpose depends on medicated solution	Kayexalate for treatment of high serum potassium levels, Neomycin for reducing bacterial count before bowel surgery	Retention

Cleansing enemas, the most common type, are used for relief of constipation, for emptying the colon before surgery, diagnostic procedures, as a part of bowel retraining programs, and sometimes before childbirth.

Commercially prepared enemas require no further mixing or equipment. The cleansing enema contains about 120 cc of hypertonic solution. While the amount administered is small, the solution causes tissue fluid to be drawn into the colon increasing the fluid content there and causing evacuation. The oil retention enema contains a similar amount of oil for softening the feces, making evacuation easier. Pediatric versions are available.

OBJECTIVE 9

Select ways to adapt collecting stool specimens and administering enemas for various stages in the life span.

The patient's age may require some changes in techniques for collecting stool specimens and administrating enemas, especially the very young and the elderly.

Stool specimens

A stool specimen may be collected directly from an infant's diaper. Plastic wrap may be used to line the diaper when the entire amount must be collected. A bedside commode may be the most convenient receptacle for collection of a stool specimen from the elderly.

Enemas

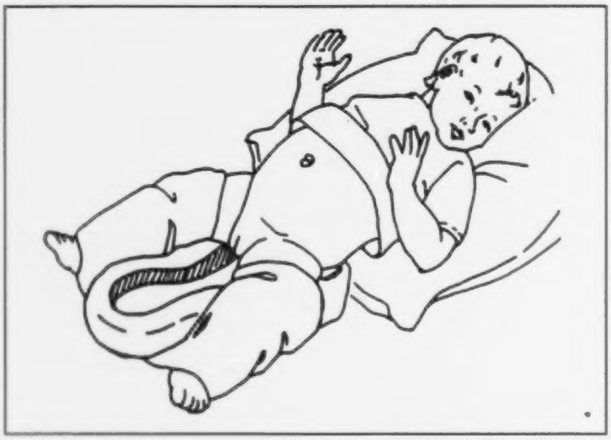
Enema equipment and solutions must be tailored to the child. Smaller tubes and decreased amounts must be used. Normal saline solution is usually used for children. The following are suggested amounts of solutions for cleansing enemas.

Infant	150 - 250 cc
Toddler	250 - 350 cc
School-age child	300 - 500 cc
Adolescent	500 - 700 cc
Adult	750 - 1000 cc

The length of the tube that is actually inserted will vary with the age of the patient.

Infant	1 - 1.5 inches
Children	2 - 3 inches
Adults	3 - 4 inches

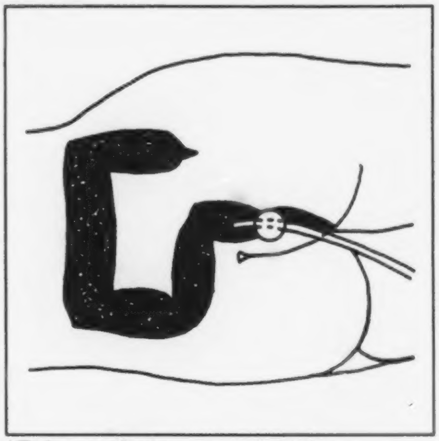
Both children and the elderly may have more difficulty holding the enema solution. The enema may have to be given with the patient positioned on the bedpan. Additionally, an infant or small child may require a diaper or sheet wrapped around the legs to hold them in position.



A tightly rolled towel placed between the buttocks and pressed against the anal area may help the patient hold a retention enema, or the buttocks may be taped together.

*From *Fundamentals of Nursing*, Third Edition, by Kozier and Erb (Menlo Park, CA: Addison-Wesley Publishing Company, 1987). Reprinted by permission.

A Foley catheter may be used for administering an enema to the elderly. The balloon would be inflated after insertion into the rectum. The catheter would then be pulled back until the balloon rests against the anal opening, helping the patient retain fluid.



*Foley catheter as rectal tube

The tip of a nipple from a baby bottle can be fitted over the end of the enema tubing. The nipple can then be positioned against the anal opening forming a kind of plug to help retain fluid.

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TESTING FOR PINWORMS

Pinworms are a fairly common intestinal parasite among human beings. Children, especially, may be affected by them. Parents are frequently instructed to obtain a special kind of specimen at home for laboratory examination.

A clean glass slide and clear cellophane tape are required. The specimen is collected early in the morning, before a bowel movement has occurred or before the anal area has been washed. It is best to obtain the specimen while the child is still asleep. The sticky side of the tape is placed briefly against the anus and then placed sticky side down on the slide. This traps any microscopic eggs on the slide for laboratory examination.

The parents should be instructed to wash their hands immediately and to avoid touching anything else to avoid contaminating themselves or anything in the environment. Gloves might be provided for the collection. The slide should be placed in a plastic bag or specially provided container for transportation to the laboratory.

JOB SHEET 1

PROVIDE FOR BOWEL ELIMINATION

X

OBJECTIVE 10a **Collect a stool specimen.**

INTRODUCTION

When a stool specimen is needed, the nurse and others who handle it must know how to protect themselves. An adequate amount of stool must be collected and preserved until testing can take place.

EQUIPMENT AND SUPPLIES

- Appropriate receptacle (Bedpan, bedside commode, or specimen pan) for collection of specimen
- Wax-coated specimen container
  NOTE: A preservative may need to be added for some collections.
- Two wooden or plastic tongue blades
- Paper towel
- Gloves
- Plastic bag for transportation of specimen
- Requisition

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Determine type of laboratory test for which specimen is being collected.
2. Determine patient's need for assistance.
3. Check for any medical or nursing diagnoses which would alter technique.
4. Determine patient's pattern of defecation, including time of last bowel movement.

Planning

5. Obtain equipment.
6. Determine type of receptacle which is appropriate for patient.

   NOTE: A specimen pan can be placed under the back edge of the toilet seat instead of its usual position near the front, as for collection of urine.

General Science Skills
- Collect specimens

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practice/procedure
- Develop good work habits/attitudes

7. Explain procedure to patient.

   NOTE: Stress to patient that stool specimen should not be mixed with urine or water.

Implementation

8. Assist patient as necessary.

9. Apply gloves.

10. Using tongue blades, take about two tablespoons or one inch of stool into specimen container. If stool is liquid, pour 15 - 30 cc of stool into specimen cup.

    NOTE: If any portion of stool appears abnormal, include that portion in specimen.

11. Fasten lid securely.

12. Wrap tongue blades in paper towel and place in appropriate receptacle.

13. Remove gloves without contaminating self.

14. Wash hands.

15. Label container with patient's name.

16. Place container in plastic bag.

17. Attach requisition.

18. Send specimen to lab promptly or store appropriately.

Evaluation

19. Evaluate according to the following criteria:

    a. Stool was not abnormal in amount, color, shape, consistency or odor.

    b. Adequate amount of stool was collected.

    c. Container is not contaminated by stool.

- Deal effectively with clients/customers/ patients

Documentation

20. Record:
    a. Time of collection.
    b. Test ordered.
    c. Transportation of stool to lab or storage.
    d. Any abnormalities noted.

BASIC SKILLS

PROVIDE FOR BOWEL ELIMINATION X

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Following written instructions
- Interpreting forms and records

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Making measurements

SCIENCE SKILLS

- Collecting specimens
- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with client/customer/patient

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with client/customer/patient
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer/patient

- If students have difficultly following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used. Stress the importance of learning medical terminology.

- If students have difficulty completing forms and records, examine the structure of the forms being used.

- If students have difficulty using English and metric measures or making measurements:
    - Review units of measure in the English and metric systems.
    - Determine which system is used on the available instrument and demonstrate its use.

- If students have difficulty collecting specimens:
    - Explain that this procedure sometimes makes new students nervous, but is an easy, essential procedure that becomes routine with practice.
    - Discuss the extreme importance of following all safety procedures.

- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.

- If students have difficulty investigating health issues, discuss the medical conditions that might require the nurse to provide interventions related to bowel elimination.

- If students have difficulty applying active listening skills:
    - Encourage them to familiarize themselves with the patient's history before beginning the procedure.
    - Have them practice listening and then repeating the information.

      EXAMPLE: Patient: "That's too hot."
      Student: "If this water is too hot, I'll cool it down."

    - Suggest that they be ready to listen before beginning the communication.
    - Stress the importance of focusing on the speaker.

  - Remind them that maintaining eye contact enhances listening ability.

- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before directions are begun.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.

- If students have difficulty applying questioning techniques:
  - Instruct them to be prepared and have their questions organized before the communication begins.
  - Stress the importance of accurate questioning to identify subjective symptoms.

- If students have difficulty applying/analyzing non-verbal communication, discuss some ways in which the student can convey information non-verbally.

  EXAMPLE: The student can convey concern for the comfort and self-esteem of the patient by providing privacy during the procedure.

- If students have difficulty analyzing/applying non-verbal communication, discuss some ways in which patients reveal information non-verbally.

  EXAMPLE: Facial expressions Body position
  Tone of voice Mannerisms
  Movements

- If students have difficulty communicating with, interacting with, or dealing effectively with the client/customer/patient, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty obtaining confidence of others:
  - Suggest they review communication and interpersonal or relating skills.
  - Suggest they review appropriate behavior.
  - Suggest that they review the procedure and the part they play in the procedure.
  - Review the proper appearance for a professional.
  - Discuss the importance of having a positive attitude.
  - Discuss with a trusted professional the reasons that may be contributing to the lack of confidence.
- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient in a dignified manner.
  - Discuss the importance of esteem in all areas of life. Review communication and interpersonal or relating skills.
- If students have difficulty mastering a specific job task/procedure:
  - Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.
  - Suggest they study each component of the procedure to determine which area is causing difficulty.
  - Review the entire procedure.
  - Team them with proficient students or professionals to practice the procedure.
- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.
  - Review the safety procedures relevant to the specific task.

- If students have difficulty developing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits and attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.
  - Make sure the student knows what is expected of him or her.

JOB
SHEET 2

PROVIDE FOR BOWEL ELIMINATION

X

OBJECTIVE 10b

Check stool for occult blood.

INTRODUCTION

Nurses' duties include testing for occult or hidden blood. Patients may collect the specimen at home and bring or send it to a medical office or laboratory for testing. In this case, the nurse would probably be the one to instruct the patient in the technique for collecting the specimen.

While several types of materials are available for such testing, guaiac paper and a developing solution are the most common.

EQUIPMENT AND SUPPLIES

- Commercially prepared slide
- Developing solution
- Small wooden spatula
- Gloves
- Paper towel
- Watch with second hand

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Note any medical or nursing diagnoses which might be associated with the presence of blood in the stool.
2. Check for any medications which might cause bleeding in the GI tract.
3. Assess the patient's dietary patterns, especially meat intake.

   NOTE: The physician may want the patient to avoid red meat for a specified period before the specimen is obtained.

4. Determine patient's ability to collect specimen if this is desired.

Planning

5. Obtain all equipment.
6. Read manufacturer's directions carefully for specific directions.

General Science Skills
- Use scientific instruments (watch)
- Collect specimens

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

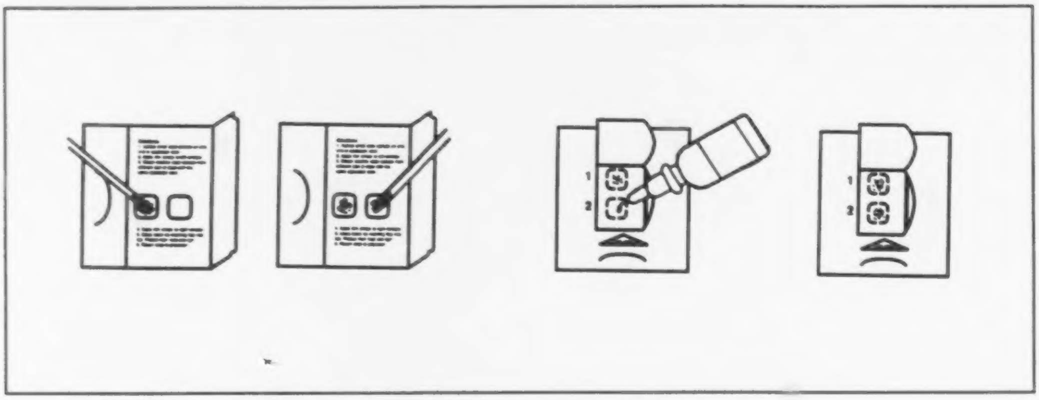
Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures

7. Explain procedure to patient.

Implementation

8. Assist patient as necessary in obtaining specimen.
9. Wash hands.
10. Put on gloves.
11. Open cover of the slide on side designated for stool collection.
12. Using wooden spatula, spread a thin layer of stool collected from separate areas of specimen over both sites indicated on slide.
13. Close cover.
14. Wrap wooden spatula in paper towel and dispose of in proper receptacle.
15. Open flap on opposite side of material.
16. Place 2 drops of developing fluid over each area of slide, including the control.
17. Wait 30 - 60 seconds for reaction to occur.
    a. A bluish discoloration means that blood is present.
    b. If no color change occurs, the specimen result is considered negative.

- Develop good work habits/attitudes
- Deal effectively with clients/customers/ patients



18. Close flaps and dispose of slide in proper receptacle.

19. Remove gloves without contaminating self.

20. Wash hands.

Evaluation

21. Evaluate according to following criteria:

    a. Test does not indicate the presence of blood in feces.

    b. Stool is not abnormal in amount, color, shape, consistency or odor.

Documentation

22. Record:

    a. Results of test

    b. Any abnormal characteristics of stool

PROVIDE FOR BOWEL ELIMINATION

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for: READING SKILLS
WRITING SKILLS
INTERPERSONAL/RELATING SKILLS
CREATIVE THINKING/PROBLEM SOLVING SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instrument (watch)

— Collecting specimens

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with client/customer/patient

INTERPERSONAL/RELATING

- Analyzing/applying non-verbal communication
- Interacting with client/customer/patient
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer/patient

- If students have difficulty following written instructions:
    - Discuss the possible consequences of not following instructions precisely.
    - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty using the watch, review the correct procedure for its use.
- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 3

PROVIDE FOR BOWEL ELIMINATION

OBJECTIVE 10c

Administer a cleansing enema.

INTRODUCTION

Cleansing enemas are intended to remove feces from the colon. The large volume of fluid and the effects of the solution act to increase peristalsis and stimulate defecation. The enema must be given correctly to achieve the maximum effectiveness with a minimum of discomfort to the patient.

EQUIPMENT AND SUPPLIES

- Disposable enema set

  NOTE: These typically contain a rigid plastic bucket or a flexible plastic bag with a rectal tube equipped with a clamp. Enema soap, lubricant and disposable underpad may also be included.

- Appropriate solution
- Bath thermometer

  or

- Pre-packaged cleansing enema
- Lubricant (amount supplied may be sufficient)
- Disposable underpad
- Bath blanket
- Toilet tissue
- Bedpan
- Gloves
- IV pole (Optional)

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Check doctor's order for type of enema to be given or any special instructions.
2. Evaluate patient's understanding of procedure.
3. Evaluate patient's ability to assume desired position for enema.
4. Assess patient's ability to hold enema solution.
5. Check for presence of hemorrhoids.

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (thermometer)
- Collect specimens

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques

6. Check for any medical or nursing diagnoses which would alter procedure.

Planning

7. Wash hands.

8. Explain procedure to patient.

9. Obtain equipment.

10. For enema set:

    a. Assemble equipment as necessary.

    b. Move clamp on tubing to convenient position and close clamp.

    c. Mix solution indicated

        1) Normal saline — 2 teaspoons salt to 1000 cc water or use prepared solution

        2) Soap solution — 5 cc castile soap to 1000 cc water

        3) Tap water — 1000 cc water

    d. Use bath thermometer to check for correct temperature (105° F).

CAUTION

BURN POSSIBLE. Solutions too hot may burn rectal mucosa. Check temperature of solution before administration.

CAUTION

CRAMPING POSSIBLE. Cold fluids cause cramping and discomfort during enema administration. Check temperature of solution before administration.

- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others
- Provide positive coaching

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/patients

11. For pre-packaged cleansing enema, hold container under warm tap water to warm solution slightly.

Implementation

12. Provide privacy for patient.

13. Raise bed to convenient working height.

14. Fan-fold top covers to foot of bed and place bath blanket over patient.

15. Place disposable underpad under patient's hips.

16. Position patient on left side if not contraindicated.

    NOTE: This position encourages the flow of solution by following the natural curves of the colon. If patient will not be able to retain the solution, the patient may be placed in the supine position on the bedpan.

17. Place bedpan where it will be convenient and readily accessible.

18. Apply gloves.

19. Pull up a portion of bath blanket to expose anus.

20. For enema set

    a. Apply generous amount of lubricant from tip of rectal tube to two inches above.

    b. Release clamp and allow solution to flow through length of tubing into bedpan. Reclamp.

       NOTE: This prevents introducing air into rectum.

    c. Separate buttocks and gently insert tip of tubing 3 - 4 inches for adult with tip pointing toward umbilicus.

    d. Open clamp to begin flow.

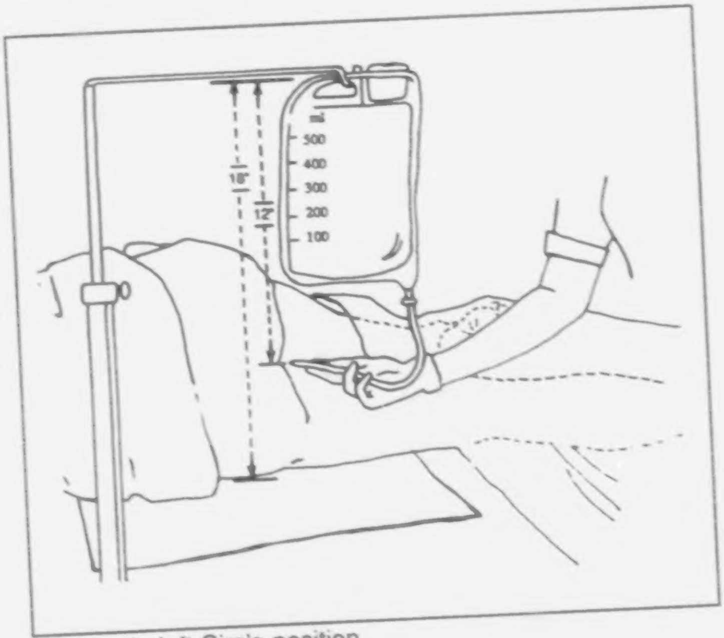
e. Raise bag or bucket gradually to a height of 12 to 18 inches above anus. (Container may be attached to IV pole at appropriate level if desired.)

NOTE: Height increases the pressure of the solution entering the rectum, if the bag is too high or raised too quickly, the pressure will stimulate the urge to defecate before an adequate amount of solution has been administered.

f. If patient complains of cramping, clamp tubing for a short time until discomfort subsides, then resume administration.

g. Encourage patient to take as much solution as possible.

h. When all of solution has been administered or patient can hold no more, clamp tubing and lower container.



*Enema in left Sim's position

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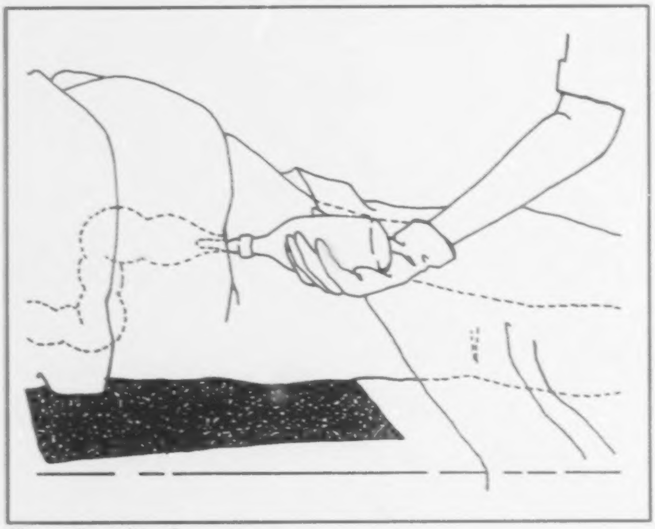
*Reproduced by permission from Hogan and Sorrentino, *Textbook for Long-Term Care Assistants*, St. Louis, Missouri, 1988, The C.V. Mosby Company.

21. For pre-packaged cleansing enema:
    a. Remove protective plastic cap from tip.
    b. Apply more lubricant if needed.
    c. Separate buttocks and gently insert tip about two inches.
    d. Administer contents by squeezing bottle, rolling container up toward tip as fluid is expelled.



*Inserting tip of enema

22. Remove rectal tube.
23. Instruct patient to try to hold solution as long as possible.
24. Discard equipment or rinse enema set and store in patient's unit.
25. Remove gloves without contaminating self.
26. Wash hands.

---

*Reproduced by permission from Hogan and Sorrentino, *Textbook for Long-Term Care Assistants*, St. Louis, Missouri, 1988, The C.V. Mosby Company.

27. Assist patient to bathroom or bedpan. Instruct patient using toilet stool not to flush stool until nurse checks contents.

28. Assist patient in cleansing area as needed.

Evaluation

29. Evaluate according to following criteria:

    a. Patient was able to expel solution and stool.

    b. Patient did not experience unnecessary discomfort or fatigue from enema administration.

    c. Stool was not abnormal in amount, color, shape, consistency or odor.

Documentation

30. Record:

    a. Type of solution.

    b. Amount of solution.

    c. Temperature of solution.

    d. Results of enema describing amount, color and consistency of stool.

    e. Any flatus expelled.

    f. Any difficulty in retaining solution.

    g. Patient's tolerance for procedure.

    h. Any abnormal contents of stool.

    i. Any pain or other complaints of patient.

PROVIDE FOR BOWEL ELIMINATION

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (thermometer)

— Collecting specimens

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with client/customer/patient

INTERPERSONAL/RELATING

- Analyzing/applying non-verbal communication
- Interacting with client/customer/patient
- Obtaining confidence of others
- Developing esteem in self/others
- Providing positive coaching

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer/patient

- If students have difficulty using thermometer, review its proper use.
- If students have difficulty providing positive coaching:
  - Review the student's role in coaching the patient.
  - Review oral communication skills.
  - Encourage the students to use positive encouragement rather than negative criticism.

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  - Discuss the need for the student to maintain a positive, confident attitude.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 4 PROVIDE FOR BOWEL ELIMINATION X

OBJECTIVE 10d

Administer a retention enema.

INTRODUCTION

A retention enema is intended to remain in the colon so the solution will have some effect on the body. For this reason, administration technique must vary somewhat from that of the cleansing enema. Amount of solution and height of container during administration are the two items which will have the greatest impact on the ability to retain the enema.

EQUIPMENT AND SUPPLIES

- Disposable enema set
- Appropriate solution
- Bath thermometer

or

- Pre-packaged oil retention enema
- Lubricant
- Disposable underpad
- Bath blanket
- Toilet tissue
- Bedpan
- Gloves

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Check doctor's order for type of enema to be given or any special instructions.
2. Evaluate patient's understanding of procedure.
3. Evaluate patient's ability to assume desired position for enema.
4. Assess patient's ability to hold enema solution.
5. Check for presence of hemorrhoids.
6. Check for any medical or nursing diagnoses which would alter procedure.

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (thermometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication

Planning

7. Wash hands.

8. Explain procedure to patient, including purpose of administration.

   NOTE: Make sure patient understands that solution is to be held for desired effect.

9. Obtain equipment.

10. For enema set:

    a. Mix solution according to instructions.

    b. Heat solution to 105° F.

CAUTION

BURN POSSIBLE. Some retention enema solutions must reach boiling point to mix ingredients. Allow solutions to cool to prevent burns to rectal mucosa.

---

    c. Assemble equipment as necessary.

    d. Move the clamp on tubing to convenient position and clamp.

11. For pre-packaged oil retention enema, hold container under warm tap water to warm solution slightly.

Implementation

12. Provide privacy for patient.

13. Raise bed to convenient working height.

14. Fan-fold top covers to foot of bed and place bath blanket over patient.

15. Place disposable underpad under patient's hips.

- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others
- Provide positive coaching

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/patients

16. Position patient on left side if not contraindicated.

    NOTE: This position encourages the flow of solution by following the natural curves of the colon.

17. Apply gloves.

18. Pull up a portion of bath blanket to expose anus.

19. For enema set:

    a. Apply generous amount of lubricant from tip of rectal tube to two inches above.

    b. Release clamp and allow solution to flow through length of tubing into bedpan. Reclamp.

       NOTE: This prevents introducing air into rectum.

    c. Separate buttocks and gently insert tip of tubing 3 - 4 inches for adult, with tip pointing toward umbilicus.

    d. Open clamp to begin flow.

    e. Raise bag or bucket gradually to a height of 5 inches above anus.

       NOTE: Height increases the pressure of the solution entering the rectum and stimulates the urge to defecate.

    f. If patient complains of cramping, clamp tubing for a short time until discomfort subsides, then resume administration.

    g. Encourage patient to take as much solution as possible.

    h. When all of solution has been administered, clamp tubing and lower container.

20. For pre-packaged oil retention enema:

    a. Remove protective plastic cap from tip.

    b. Apply more lubricant if needed.

c. Separate buttocks and gently insert tip about two inches.

d. Administer contents by squeezing bottle, rolling container up toward tip as fluid is expelled.

21. Remove rectal tube.

22. Instruct patient to try to hold solution at least 30 minutes or as indicated by specific orders.

23. Discard equipment or rinse enema set and store in patient's unit.

24. Remove gloves without contaminating self.

25. Wash hands.

26. Assist patient to bathroom after appropriate time period has elapsed.

Evaluation

27. Evaluate according to following criteria:

    a. Patient was able to retain solution.

    b. Patient did not experience pain or fatigue from enema administration.

Documentation

28. Record:

    a. Type of solution.

    b. Amount of solution.

    c. Temperature of solution.

    d. Any difficulty in retaining solution.

    e. Patient's tolerance for procedure.

    f. Any pain or other complaints of patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Making measurements

SCIENCE SKILLS

- Using scientific instruments (thermometer)
- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with client/customer/patient

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with client/customer/patient
- Obtaining confidence of others
- Developing esteem in self/others
- Providing positive coaching

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer/patient

- For suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

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JOB SHEET 5

PROVIDE FOR BOWEL ELIMINATION

X

OBJECTIVE 10e

Administer a Harris flush/colonic irrigation.

INTRODUCTION

A Harris flush is a procedure intended to relieve flatus. Much of the procedure is similar to a cleansing enema except we do not want the patient to retain the solution. We "irrigate" the colon by allowing for a return flow of solution at frequent intervals. This will stimulate peristalsis and allow the patient to expel flatus.

EQUIPMENT AND SUPPLIES

- Disposable enema set
- Appropriate solution
- Bath thermometer
- Lubricant
- Disposable underpad
- Bath blanket
- Toilet tissue
- Bedpan
- Gloves

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Check doctor's order for type of solution to be used or any special instructions.
2. Evaluate patient's understanding of procedure.
3. Evaluate patient's ability to assume desired position for enema.
4. Check for presence of hemorrhoids.
5. Check for any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Explain procedure to patient.
8. Obtain equipment.

General Science Skills
- Use scientific instruments (thermometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

9. Assemble equipment as necessary.

10. Move clamp on tubing to convenient position and close clamp.

11. Mix solution indicated.

    NOTE: 300-500 cc should be an adequate amount of solution to mix since it is an irrigation and solution is reused.

12. Use bath thermometer to check for correct temperature (105° F).

CAUTION

BURN POSSIBLE. Solutions too hot may burn rectal mucosa. Check temperature of solution before administration.

CAUTION

CRAMPING POSSIBLE. Cold fluids cause cramping and discomfort during enema administration. Check temperature of solution before administration.

Implementation

13. Provide privacy for patient.

14. Raise bed to convenient working height.

15. Fan-fold top covers to foot of bed and place bath blanket over patient.

16. Place disposable underpad under patient's hips.

17. Position patient on left side if not contraindicated.

18. Apply gloves.

19. Pull up a portion of bath blanket to expose anus.

20. Apply generous amount of lubricant from tip of rectal tube to two inches above.

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication

- Interact with clients/ customers/patients

Leadership/Influencing Skills

- Obtain confidence of others
- Develop esteem in self/others
- Provide positive coaching

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

21. Release clamp and allow solution to flow through length of tubing into bedpan. Reclamp.

    NOTE: This prevents introducing air into rectum.

22. Separate buttocks and gently insert tip of tubing 3 - 4 inches for adult pointing tip toward umbilicus.

23. Open clamp to begin flow.

24. Raise bag or bucket gradually to a height of 12 to 18 inches above anus.

25. After 100 - 200 cc of solution has been administered, lower bag or bucket to a point 12 to 18 inches below the anus, allowing for a return flow of solution.

26. Repeat administration and return flow five or six times, replacing solution as necessary.

    NOTE: Fecal material and gas bubbles will return when the container is lowered. If the solution becomes thick it will have to be replaced.

27. Remove rectal tube.

28. Discard equipment or rinse enema set and store in patient's unit.

29. Remove gloves without contaminating self.

30. Wash hands.

Evaluation

31. Evaluate according to following criteria:

    a. Patient was able to expel flatus.

    b. Patient did not experience unnecessary discomfort or fatigue from enema administration.

    c. Abdomen was soft without distention.

Documentation

32. Record:

    a. Type of solution.

    b. Amount of solution.

    c. Temperature of solution.

    d. Flatus expelled.

    e. Condition of abdomen to palpation.

    f. Patient's tolerance for procedure.

    g. The patient's assessment of the success of the procedure.

PROVIDE FOR BOWEL ELIMINATION

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (thermometer)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with client/customer/patient

INTERPERSONAL/RELATING

- Analyzing/applying non-verbal communication
- Interacting with client/customer/patient
- Obtaining confidence of others
- Developing esteem in self/others
- Providing positive coaching

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer/patient

- If students have difficulty using thermometer, review its proper use.
- If students have difficulty providing positive coaching:
  - Review the student's role in coaching the patient.
  - Review oral communication skills.
  - Encourage the students to use positive encouragement rather than negative criticism.
  - Discuss the need for the student to maintain a positive, confident attitude.

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- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 6

PROVIDE FOR BOWEL ELIMINATION X

OBJECTIVE 10f

Remove a fecal impaction.

INTRODUCTION

A fecal impaction is a hardened mass of stool which the patient cannot eliminate. Sometimes liquid stool seeps around the impaction. Enemas may be given in conjunction with manual removal of the fecal mass. Perhaps an oil retention enema may be given before the attempt to remove the stool or a cleansing enema may be given afterward to stimulate peristalsis and complete emptying of the colon.

This procedure is uncomfortable for the patient. The nurse must be gentle to avoid injury to the intestinal mucosa. The stimulation of the vagus nerve which occurs may alter the heart rate and cause difficulty for patients with cardiac problems. Patients who have had recent surgical procedures in the area and patients who have bleeding tendencies could suffer extreme consequences with removal of a fecal impaction.

EQUIPMENT AND SUPPLIES

- Lubricant
- Gloves
- Bath blanket
- Disposable underpad
- Bedpan
- Washcloth, towel, bath basin as indicated

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Determine when patient had last bowel movement.
2. Assess any patient complaints of constipation.
3. Check for the presence of hemorrhoids.
4. Check for any medical diagnoses which would indicate that the procedure would be harmful for the patient.
5. Check for any nursing diagnoses which would alter the procedure.
6. Assess possible need for pain medication before beginning procedure.
7. Assess the pulse rate.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/patients

Planning

8. Wash hands.

9. Obtain equipment.

10. Explain procedure to patient.

11. Provide privacy for patient.

12. Raise bed to comfortable working height.

13. Place bath blanket and fan-fold top covers to foot of bed.

14. Place disposable underpad under patient.

15. Position patient on side.

16. Place bedpan close to patient.

17. Apply gloves.

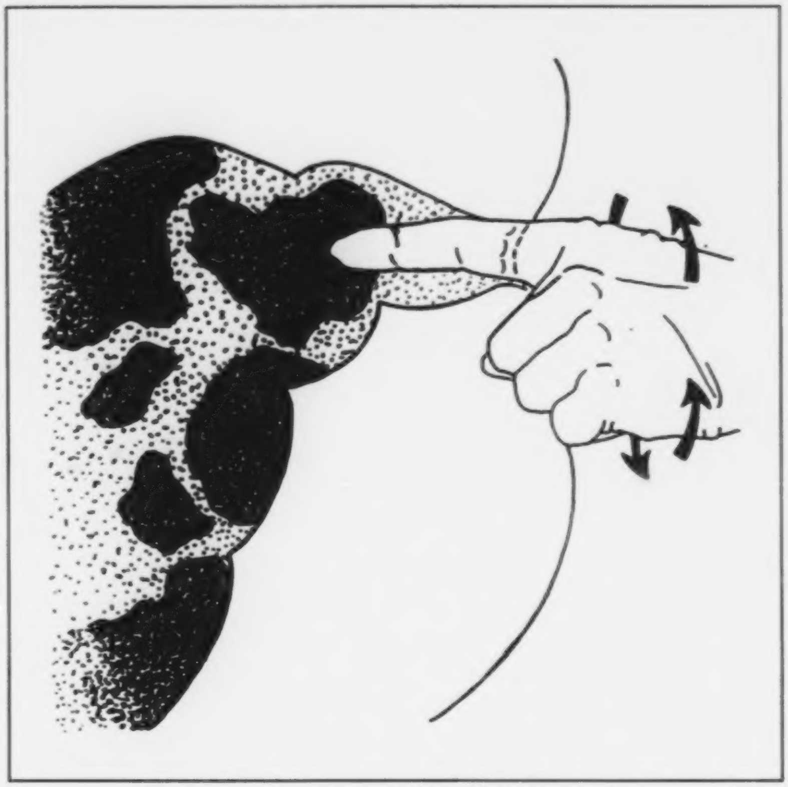
Implementation

18. Apply generous amount of lubricant to index finger of dominant hand.

19. Insert finger gently into the rectum and move to the fecal mass.

20. Carefully move the finger to break off a portion of the mass.

21. Work small piece of feces toward anus for removal.



22. Place pieces of feces in bedpan.

23. Continue to remove feces watching patient for signs of fatigue, increased pain, change in pulse or rectal bleeding. Allow patient to rest for short periods.

CAUTION

CARDIAC ARRHYTHMIAS POSSIBLE. Stimulation of the vagus nerve can cause cardiac arrhythmias. Monitor patient closely.

24. When procedure is complete, dispose of feces in bedpan.

25. Assist patient to wash and dry anal area.

26. Remove gloves without contaminating self.

27. Wash hands.

28. Administer any enemas ordered or assist patient to bathroom or bedpan if desired.

Evaluation

29. Evaluate according to following criteria:

    a. Rectum is free of stool.

    b. Patient states feeling relief.

    c. Pulse rate remains within normal limits.

    d. Patient did not experience unnecessary pain or fatigue.

Document

30. Document

    a. Amount, consistency and color of stool removed.

    b. Patient's tolerance for procedure.

    c. Any problems encountered during removal of impaction.

PROVIDE FOR BOWEL ELIMINATION

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Skill development for:

READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

— Applying questioning techniques

— Analyzing/applying non-verbal communication

— Communicating with client/customer/patient

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with client/customer/patient
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer/patient

- For suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

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PRACTICAL TEST 1

PROVIDE FOR BOWEL ELIMINATION X

JOB SHEET 1

Collect a stool specimen.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined type of laboratory test for which specimen was being collected.	_____	_____
2. Determined patient's need for assistance.	_____	_____
3. Checked for any medical or nursing diagnoses which would alter technique.	_____	_____
4. Determined patient's pattern of defecation, including time of last bowel movement.	_____	_____
5. Obtained equipment.	_____	_____
6. Determined type of receptacle which is appropriate for patient.	_____	_____
7. Explained procedure to patient.	_____	_____
8. Assisted patient as necessary.	_____	_____
9. Applied gloves.	_____	_____

		YES	NO
10.	Using tongue blades, took about two tablespoons or one inch of stool into specimen container. Poured 15-30 cc of stool into specimen cup, if stool was liquid.	____	____
11.	Fastened lid securely.	____	____
12.	Wrapped tongue blades in paper towel and placed in appropriate receptacle.	____	____
13.	Removed gloves without contaminating self.	____	____
14.	Washed hands.	____	____
15.	Labeled container with patient's name.	____	____
16.	Placed container in plastic bag.	____	____
17.	Attached requisition.	____	____
18.	Sent specimen to lab promptly or stored appropriately.	____	____
19.	Evaluated according to established criteria.	____	____
20.	Documented appropriately.	____	____

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Adequate amount of stool collected	4	3	2	1
Container not contaminated by stool	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 2

PROVIDE FOR BOWEL ELIMINATION

X

JOB SHEET 2

Check stool for occult blood.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses which might be associated with the presence of blood in the stool.	____	____
2. Checked for any medications which might cause bleeding in the GI tract.	____	____
3. Assessed the patient's dietary patterns, especially to meat intake.	____	____
4. Determined patient's ability to collect specimen if this is desired.	____	____
5. Obtained all equipment.	____	____
6. Read manufacturer's directions carefully for specific directions.	____	____
7. Explained procedure to patient.	____	____
8. Assisted patient as necessary in obtaining specimen.	____	____
9. Washed hands.	____	____

	YES	NO
10. Put on gloves.	_____	_____
11. Opened cover of slide on side designated for stool collection.	_____	_____
12. Using wooden spatula, spread a thin layer of stool collected from separate areas of specimen over both sites indicated on slide.	_____	_____
13. Closed cover.	_____	_____
14. Wrapped wooden spatula in paper towel and disposed of in proper receptacle.	_____	_____
15. Opened flap on opposite side of material.	_____	_____
16. Placed 2 drops of developing fluid over each area of slide, including the control.	_____	_____
17. Waited 30-60 seconds for reaction to occur.	_____	_____
18. Closed flaps and disposed of slide in proper receptacle.	_____	_____
19. Removed gloves without contaminating self.	_____	_____
20. Washed hands.	_____	_____
21. Evaluated according to established criteria.	_____	_____
22. Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Performed steps correctly	4	3	2	1
Interpreted test results correctly	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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JOB SHEET 3

Administer a cleansing enema.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked doctor's order for type of enema to be given or any special instructions.	_____	_____
2. Evaluated patient's understanding of procedure.	_____	_____
3. Evaluated patient's ability to assume desired position for enema.	_____	_____
4. Assessed patient's ability to hold enema solution.	_____	_____
5. Checked for presence of hemorrhoids.	_____	_____
6. Checked for any medical or nursing diagnoses which would alter procedure.	_____	_____
7. Washed hands.	_____	_____
8. Explained procedure to patient.	_____	_____
9. Obtained equipment.	_____	_____

	YES	NO
10. For enema set:		
a. Assembled equipment as necessary.		
b. Moved clamp on tubing to convenient position and closed clamp.		
c. Mixed solution indicated.		
d. Used bath thermometer to check for correct temperature.		
11. Held pre-packaged cleansing enema container under warm tap water to warm solution slightly.		
12. Provided privacy for patient.		
13. Raised bed to convenient working height.		
14. Fan-folded top covers to foot of bed and placed bath blanket over patient.		
15. Placed disposable underpad under patient's hips.		
16. Positioned patient on left side if not contraindicated.		
17. Placed bedpan where it was convenient and readily accessible.		
18. Applied gloves.		
19. Pulled up a portion of bath blanket to expose anus.		
20. For enema set:		
a. Applied generous amount of lubricant from tip of rectal tube to two inches above.		

	YES	NO
b. Released clamp and allowed solution to flow through length of tubing into bedpan. Reclamped.	_____	_____
c. Separated buttocks and gently inserted tip of tubing with tip pointing toward umbilicus.	_____	_____
d. Opened clamp to begin flow.	_____	_____
e. Raised bag or bucket gradually to a height of 12 to 18 inches above anus.	_____	_____
f. If patient complained of cramping, clamped tubing for a short time until discomfort subsided, then resumed administration.	_____	_____
g. Encouraged patient to take as much solution as possible.	_____	_____
h. When all of solution had been administered or patient could hold no more, clamped tubing and lowered container.	_____	_____
21. For pre-packaged cleansing enema:		
a. Removed protective plastic cap from tip.	_____	_____
b. Applied more lubricant if needed.	_____	_____
c. Separated buttocks and gently inserted tip about 2 inches.	_____	_____
d. Administered contents by squeezing bottle, rolling container up toward tip as fluid was expelled.	_____	_____
22. Removed rectal tube.	_____	_____
23. Instructed patient to try to hold solution as long as possible.	_____	_____

	YES	NO
24. Discarded equipment or rinsed enema set and stored in patient's unit.	_____	_____
25. Removed gloves without contaminating self.	_____	_____
26. Washed hands.	_____	_____
27. Assisted patient to bathroom or bedpan. Instructed patient using toilet stool not to flush stool until nurse checked contents.	_____	_____
28. Assisted patient in cleansing area as needed.	_____	_____
29. Evaluated according to established criteria.	_____	_____
30. Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Enema was administered correctly	4	3	2	1
Handled equipment skillfully	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date) (Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 4

PROVIDE FOR BOWEL ELIMINATION

X

JOB SHEET 4

Administer a retention enema.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked doctor's order for type of enema to be given or any special instructions.	_____	_____
2. Evaluated patient's understanding of procedure.	_____	_____
3. Evaluated patient's ability to assume desired position for enema.	_____	_____
4. Assessed patient's ability to hold enema solution.	_____	_____
5. Checked for presence of hemorrhoids.	_____	_____
6. Checked for any medical or nursing diagnoses which would alter procedure.	_____	_____
7. Washed hands.	_____	_____
8. Explained procedure to patient, including purpose of administration.	_____	_____
9. Obtained equipment.	_____	_____

	YES	NO
10. For enema set:		
a. Mixed solution according to instructions.	____	____
b. Heated solution to 105° F.	____	____
c. Assembled equipment as necessary.	____	____
d. Moved the clamp on tubing to convenient position and clamped.	____	____
11. For pre-packaged oil retention enema, held container under warm tap water to warm solution slightly.	____	____
12. Provided privacy for patient.	____	____
13. Raised bed to convenient working height.	____	____
14. Fan-folded top covers to foot of bed and placed bath blanket over patient.	____	____
15. Placed disposable underpad under patient's hips.	____	____
16. Positioned patient on left side if not contraindicated.	____	____
17. Applied gloves.	____	____
18. Pulled up a portion of bath blanket to expose anus.	____	____
19. For administration with enema set:		
a. Applied generous amount of lubricant from tip of rectal tube to two inches above.	____	____
b. Released clamp and allowed solution to flow through length of tubing into bedpan. Reclamped.	____	____

	YES	NO
c. Separated buttocks and gently inserted tip of tubing, 3-4 inches for adult, with tip pointing toward umbilicus.	_____	_____
d. Opened clamp to begin flow.	_____	_____
e. Raised bag or bucket gradually to a height of 5 inches above anus.	_____	_____
f. If patient complained of cramping, clamped tubing for a short time until discomfort subsided, then resumed administration.	_____	_____
g. Encouraged patient to take as much solution as possible.	_____	_____
h. When all of solution had been administered, clamped tubing and lowered container.	_____	_____
20. For pre-packaged oil retention enema:		
a. Removed protective plastic cap from tip.	_____	_____
b. Applied more lubricant if needed.	_____	_____
c. Separated buttocks and gently inserted tip about two inches.	_____	_____
d. Administered contents by squeezing bottle, rolling container up toward tip as fluid was expelled.	_____	_____
21. Removed rectal tube.	_____	_____
22. Instructed patient to try to hold solution at least 30 minutes or as indicated by specific orders.	_____	_____

	YES	NO
23. Discarded equipment or rinsed enema set and stored in patient's unit.		
24. Removed gloves without contaminating self.		
25. Washed hands.		
26. Assisted patient to bathroom after appropriate time period had elapsed.		
27. Evaluated according to established criteria.		
28. Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Provided clear instructions for patient	4	3	2	1
Enema was administered correctly	4	3	2	1
Handled equipment appropriately	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 5

PROVIDE FOR BOWEL ELIMINATION

X

JOB SHEET 5

Administer a Harris flush/colonic irrigation.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked doctor's order for type of solution to be used or any special instructions.	_____	_____
2. Evaluated patient's understanding of procedure.	_____	_____
3. Evaluated patient's ability to assume desired position for enema.	_____	_____
4. Checked for presence of hemorrhoids.	_____	_____
5. Checked for any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Explained procedure to patient.	_____	_____
8. Obtained equipment.	_____	_____
9. Assembled equipment as necessary.	_____	_____

	YES	NO
10. Moved clamp on tubing to convenient position and closed clamp.	____	____
11. Mixed solution indicated.	____	____
12. Used bath thermometer to check for correct temperature.	____	____
13. Provided privacy for patient.	____	____
14. Raised bed to convenient working height.	____	____
15. Fan-folded top covers to foot of bed and placed bath blanket over patient.	____	____
16. Placed disposable underpad under patient's hips.	____	____
17. Positioned patient on left side if not contraindicated.	____	____
18. Applied gloves.	____	____
19. Pulled up a portion of bath blanket to expose anus.	____	____
20. Applied generous amount of lubricant from tip of rectal tube to two inches above.	____	____
21. Released clamp and allowed solution to flow through length of tubing into bedpan. Reclamped.	____	____
22. Separated buttocks and gently inserted tip of tubing.	____	____
23. Opened clamp to begin flow.	____	____
24. Raised bag or bucket gradually to a height of 12 to 18 inches above anus.	____	____

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	YES	NO
25. After 100-200 cc of solution had been administered, lowered bag or bucket to a point 12 to 18 inches below the anus, allowing for a return flow of solution.	_____	_____
26. Repeated administration and returned flow five or six times, replacing solution as necessary.	_____	_____
27. Removed rectal tube.	_____	_____
28. Discarded equipment or rinsed enema set and stored in patient's unit.	_____	_____
29. Removed gloves without contaminating self.	_____	_____
30. Washed hands.	_____	_____
31. Evaluated according to established criteria.	_____	_____
32. Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
	4	3	2	1
Provided clear instructions for procedure				
	4	3	2	1
Harris flush administered correctly				
	4	3	2	1
Handled equipment correctly				

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

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(Date)

(Evaluator's Signature)

(Evaluator's Position)

JOB SHEET 6

Remove a fecal impaction.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined when patient had last bowel movement.	_____	_____
2. Assessed any patient complaints of constipation.	_____	_____
3. Checked for the presence of hemorrhoids.	_____	_____
4. Checked for any medical diagnoses which would indicate that the procedure would be harmful for the patient.	_____	_____
5. Checked for any nursing diagnoses which would alter the procedure.	_____	_____
6. Assessed possible need for pain medication before beginning procedure.	_____	_____
7. Assessed the pulse rate.	_____	_____
8. Washed hands.	_____	_____
9. Obtained equipment.	_____	_____

	YES	NO
10. Explained procedure to patient.		
11. Provided privacy for patient.		
12. Raised bed to comfortable working height.		
13. Placed a bath blanket and fan-folded top covers to foot of bed.		
14. Placed disposable underpad under patient.		
15. Positioned patient on side.		
16. Placed bedpan close to patient.		
17. Applied gloves.		
18. Applied generous amount of lubricant to index finger of dominant hand.		
19. Inserted finger gently into the rectum and moved to the fecal mass.		
20. Carefully moved the finger to break off a portion of the mass.		
21. Worked small piece of feces toward anus for removal.		
22. Placed pieces of feces in bedpan.		
23. Continued to remove feces, watching patient for signs of fatigue, increased pain, change in pulse or rectal bleeding. Allowed patient to rest for short periods.		
24. When procedure was complete, disposed of feces in bedpan.		
25. Assisted patient to wash and dry anal area.		

	YES	NO
26. Removed gloves without contaminating self.	_____	_____
27. Washed hands.	_____	_____
28. Administered any enemas ordered or assisted patient to bathroom or bedpan if desired.	_____	_____
29. Evaluated according to established criteria.	_____	_____
30. Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Explained procedure	4	3	2	1
Performed steps of procedure` correctly	4	3	2	1
Performed procedure as gently as possible	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
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1 — Unskilled — Is familiar with process, but is unable to perform job.

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(Date) (Evaluator's Signature)

(Evaluator's Position)

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WRITTEN TEST

PROVIDE FOR BOWEL ELIMINATION

X

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with bowel elimination with their correct definitions. Write the correct letter in the blank.

Part I

______1. Intestinal gas

______2. Rhythmic movement of the gastrointestinal system

______3. An agent used to remove gas from the gastrointestinal tract

______4. Circular muscle controlling an opening

______5. Mass of hard, dry feces which cannot be expelled

______6. Introduction of fluid into the colon

______7. An agent used to treat parasitic worms

______8. Dilated veins around the anus

a. Anthelmintic

b. Carminative

c. Enema

d. Flatus

e. Flushing

f. Gastrocolic reflex

g. Hemorrhoids

h. Impaction

i. Laxative

j. Melena

k. Peristalsis

l. Sphincter

Part 2

______1. Plant food sources which provide bulk and stimulate peristalsis

______2. Hidden

______3. Medication used to stimulate bowel movement

______4. The opening at the lower end of the gastrointestinal tract

______5. Final portion of large intestine

______6. Feces

______7. Increase in peristalsis when food or fluid is consumed

______8. Difficult defecation with hard, dry fecal material

a. Anus
b. Carminative
c. Constipation
d. Fiber
e. Gastrocolic reflex
f. Guaiac
g. Impaction
h. Laxative
i. Melena
j. Occult
k. Rectum
l. Stool

Part 3

______1. The act of expelling stool

______2. Test using specially treated paper to determine the presence of occult blood in the stool

______3. An organism which lives on another organism and cannot exist alone

______4. Frequent passage of watery stool

______5. The large intestine

a. Anthelmintic
b. Colon
c. Defecation
d. Diarrhea
e. Feces
f. Flatus
g. Guaiac
h. Impaction

______6. Black, tarry feces

______7. Waste product of the gastrointestinal system

i. Melena

j. Occult

k. Parasite

l. Rectum

OBJECTIVE 2

Select the word or phrase that completes statements about assessment of feces. Write the correct letter in the blank.

______1. The nurse has described a stool as black. The nurse is concerned because this could indicate ___.

a. bleeding high in the digestive tract
b. bile obstruction
c. malabsorption of fat
d. intestinal infection

______2. A change in the shape of stool could most likely be caused by ___.

a. change in diet
b. medications
c. presence of foreign objects
d. an intestinal obstruction

______3. Which type of medication is likely to cause a change in the color of stools?

a. Laxatives
b. Antibiotics
c. Iron preparations
d. Vitamin supplements

______4. If an inflammatory condition of the colon were present, the patient's stool would most likely ___.

a. be hard and dry
b. have an offensive odor
c. be reddish or red
d. contain mucus or pus

______5. The nurse has described a stool as yellow in color. This would most likely mean that ___.

a. there is bleeding high in the digestive tract
b. there is a bile obstruction
c. the patient is constipated
d. the patient eats only plant products

______6. The consistency of stool is most directly related to the ___.

a. foods eaten
b. activity level of the individual
c. frequency of stools
d. amount of time the mass has remained in the intestine

______7. The amount of food eaten by an individual would affect the ___.

a. bacteria level in the stool
b. shape of feces
c. amount of stool defecated
d. presence of mucus or pus

OBJECTIVE 3

Select true statements about normal bowel elimination patterns and assessment data that indicate changes in normal patterns. Write the correct letter in the blank.

______1. A hospitalized patient has had three bowel movements in the week he has been hospitalized. The nurse caring for him should realize that ___.

a. all hospitalized patients have fewer stools than normal
b. he is constipated
c. this may be his normal pattern
d. he is probably not eating

______2. In comparing the patterns of infants' stools to adult patterns, we can say ___.

a. infants have more stools
b. infant stools follow eating, but adult stools do not
c. breast-fed infants' stool patterns are more similar to adults
d. there is no difference between infants and adults

______3. When constipation is present, it is most certainly evidence that ___.

a. the affected individual is not eating correctly
b. there has been a change in activity
c. the stool has remained in the colon for a longer period of time than normal
d. there has been abdominal cramping and flatus with the expulsion of stool

______4. The fact that many people defecate in the morning can be related to ___.

a. the fact that many people do not eat breakfast
b. early morning exercise habits
c. the gastrocolic reflex
d. the stimulation from caffeine

______5. Constipation and diarrhea differ in that ___.

a. one is caused by a change in diet and the other is not
b. medications can cause diarrhea, but not constipation
c. one is a result of the stool remaining in the colon longer
d. one may cause discomfort with passage of stool and the other does not

OBJECTIVE 4

Select from a list patients who are likely to experience difficulty with bowel elimination. Write an "X" in the blank before patients likely to have difficulty.

______1. A 25-year-old pregnant female

______2. A 45-year-old male in a private room

______3. A 30-year-old female who is NPO

_______4. A 36-year-old male with pneumonia

_______5. A 19-year-old male who must stay flat with fractured vertebrae

_______6. An 80-year-old female nursing home resident who walks the length of the hall several times a day

_______7. A 50-year-old male on a regular diet

_______8. A 35-year-old female who can get up to go to the bathroom

_______9. A 20-year-old male who received a codeine preparation for pain

_______10. A 60-year-old female who takes a laxative every day at home

_______11. A 45-year-old female on a clear liquid diet

_______12. A 70-year-old male who has emphysema

OBJECTIVE 5

Choose nursing interventions to aid bowel elimination. Write the correct letter in the blank.

_______1. The nurse in the long-term care facility frequently assists residents in maintaining elimination patterns. What dietary suggestion would be appropriate?

a. Include a hot drink at breakfast
b. Have snack at bedtime
c. Limit fruits and vegetables
d. Increase foods containing calcium

_______2. The nurse who wishes to assist patients with bowel elimination could ___.

a. administer laxatives on a regular basis
b. encourage patients to stay on a liquid diet
c. encourage the maximum activity allowed
d. teach the gastrocolic reflex

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_______3. The long-term care nurse should encourage the residents to ___.

a. limit activity
b. try to "reschedule" defecation to the evening hours
c. use laxatives
d. attempt defecation in the bathroom or beside commode

_______4. Exercise which may aid bed patients with defecation involve ___.

a. doing sit-ups
b. "bicycling" the legs
c. contracting the abdominal muscles
d. deep breathing

_______5. A nurse who is concerned about a patient developing constipation would be most likely to encourage the patient to eat or drink ___.

a. white bread and rice cereal
b. an increased amount of milk and cheese
c. organ meats
d. fruit juice

OBJECTIVE 6

Choose nursing interventions for the patient with diarrhea or fecal incontinence. Write the correct letter in the blank.

_______1. Dietary treatment of diarrhea would include ___.

a. an increase in fiber
b. an increase in cold liquids
c. large quantities of dairy products
d. clear liquids

_______2. The nursing intervention that could increase the incidence of diarrhea is ___.

a. turning the patient every two hours
b. taking rectal temperatures
c. assisting the patient to a bedside commode
d. providing perineal care

______3. When fecal incontinence is present, nursing care would include ___.

a. limiting fluid intake
b. limiting fiber intake
c. use of an indwelling catheter
d. conscientious skin care

______4. Nursing interventions for the patient with diarrhea would include ___.

a. assessment of fluid balance
b. taking frequent rectal temperatures
c. applying diapers
d. providing hot and cold liquids

______5. Bowel retraining programs could include ___.

a. limiting fiber in the diet
b. administration of suppositories
c. efforts to suppress the gastrocolic reflex
d. intake and output measurements

______6. Skin care for the patient with diarrhea or fecal incontinence might include ___.

a. application of barrier creams
b. cleansing with strokes upward from the anus
c. use of a disinfectant solution like alcohol
d. allowing the skin to air dry

OBJECTIVE 7

Select appropriate guidelines for collection of stool specimens. Write the correct letter in the blank.

______1. When a stool specimen is being collected, the nurse should ___.

a. instruct the patient not to flush the toilet stool
b. collect the entire stool
c. instruct the patient to urinate first
d. discard any stool containing mucus

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______2. When collecting a stool specimen the nurse should ___.

a. include urine voided with the stool
b. add a preservative to all specimens
c. include any blood or mucus present
d. collect stools for a 24-hour period

______3. If an entire stool is needed for an examination ___.

a. a diaper should be placed on the patient
b. the specimen is being examined for occult blood
c. a bedpan may be lined with plastic wrap for the collection
d. the stool should be frozen before being transported to the lab

OBJECTIVE 8

Differentiate between types of enemas and their uses. Write an "I" in the blanks before irrigating enemas and an "R" in the blanks before retention enemas.

______1. Involves administration of 750-1000 cc of fluid

______2. A commercially prepared oil enema

______3. Delivers a type of medication

______4. Used for removing feces from the colon

______5. A normal saline enema

______6. Delivers soothing substance to tissues

OBJECTIVE 9

Select ways to adapt collecting stool specimens and administering enemas for various stages in the life span. Write the correct letter in the blank.

______1. When enemas are administered to children and the elderly, the nurse may be concerned about ___.

a. using a higher temperature for administration
b. ability of the patient to retain the solution
c. the amount of flatus expelled
d. the presence of parasites

______2. When enemas are given to small children and the elderly, it is likely that the nurse will ___.

a. give a retention enema
b. position the patient on the bedpan
c. use a soap solution enema
d. have difficulty having the patient expel the enema

______3. The amount of solution for a cleansing enema given to a 15-year-old girl is ___.

a. 250-350 cc
b. 300-500 cc
c. 400-600 cc
d. 500-700 cc

______4. A Foley catheter an be used to administer an enema to a/an ___.

a. child
b. infant
c. elderly person
d. adolescent

NOTICE The following job sheets are not part of the Written Test. If these activities have not been completed, check with your instructor.

OBJECTIVE 10

a. Collect a stool specimen. RATING ______

b. Check stool for occult blood. RATING ______

c. Administer a cleansing enema. RATING ______

d. Administer a retention enema. RATING ______

e. Administer a Harris flush/ colonic irrigation. RATING ______

f. Remove a fecal impaction. RATING ______

WRITTEN TEST ANSWERS

PROVIDE FOR BOWEL ELIMINATION

X

OBJECTIVE 1

Part 1

1. d
2. k
3. b
4. l
5. h
6. c
7. a
8. g

Part 2

1. d
2. j
3. h
4. a
5. k
6. l
7. e
8. c

Part 3

1. c
2. g
3. k
4. d
5. b
6. i
7. e

OBJECTIVE 2

1. a
2. d
3. c
4. d
5. b
6. d
7. c

OBJECTIVE 3

1. c
2. a
3. c
4. c
5. c

OBJECTIVE 4

1, 3, 5, 9, 10, 11

OBJECTIVE 5

1. a
2. c
3. d
4. c
5. d

OBJECTIVE 6

1. d
2. b
3. d
4. a
5. b
6. a

OBJECTIVE 7

1. c
2. c
3. c

OBJECTIVE 8

1. I
2. R
3. R
4. I
5. I
6. R

OBJECTIVE 9

1. b
2. b
3. d
4. c

OBJECTIVE 10

Refer to practical tests for Job Sheets 1-6.

OBJECTIVE SHEET

VITAL SIGNS

XI

INTRODUCTION

The vital signs — temperature, pulse, respiration, and blood pressure — are so named because they give us an indication of the body's essential functions. They help us quickly assess changes in physical and emotional states. The nurse must be skilled in their measurement and quickly recognize deviations from normal.

UNIT OBJECTIVE

After completing this unit, the student should be able to accurately measure vital signs using various methods and sites. The student should be able to recognize indications for measurement at different sites and recognize deviations from normal. The student will demonstrate these competencies by completing an assignment sheet, job sheets, and a written test with a minimum of 85% accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will:

1. Match terms associated with vital signs to their definitions.
2. Choose the word or phrase to complete statements about body temperature.
3. Select factors that may influence the body's temperature.
4. Compare the Celsius and Fahrenheit temperature scales.
5. Distinguish among characteristics of temperature sites.
6. List three pulse assessments.
7. Select factors that influence pulse rate, rhythm, and volume.
8. Label pulse sites.
9. Select factors to consider when assessing respiration.
10. Choose the word or phrase to complete the statements about how respiratory assessment factors may be influenced.
11. Choose the word or phrase to complete statements about assessing blood pressure.

12. Choose the word or phrase to complete statements about measuring blood pressure.

13. Name the artery normally used for assessing blood pressure.

14. Match sites for placing the blood pressure cuff with the artery where the blood pressure is assessed.

15. Document vital signs. (Assignment sheet 1)

16. Demonstrate the ability to:

    a. Obtain temperatures with mercury thermometers. (Job Sheet 1)

    b. Obtain temperatures with an electronic thermometer. (Job Sheet 2)

    c. Obtain temperature with a tympanic thermometer. (Job Sheet 3)

    d. Assess radial pulse. (Job Sheet 4)

    e. Assess apical pulse. (Job Sheet 5)

    f. Assess apical/radial pulse. (Job Sheet 6)

    g. Assess peripheral pulses with and without doppler unit. (Job Sheet 7)

    h. Assess respirations. (Job Sheet 8)

    i. Obtain blood pressure reading. (Job Sheet 9)

    j. Clean mercury thermometer. (Job Sheet 10)

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
    - — Assist students to conduct a chapter service project on assessment of vital signs.
    - — Develop objectives for service project and identify a theme.
    - — Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
    - — Plan community or school health project that involves disseminating pamphlets about hypertension.
    - — Make arrangements for students to assist with blood pressure screening at a community health fair.

DELIVERY

Objective 1

- Discuss terms associated with vital signs.
- Create a crossword puzzle using terms.
- Have a spelling bee using terms.

Objective 2

- Discuss body temperature.

Objective 3

- Discuss factors that may influence the body's temperature.

Objective 4

- Discuss Celsius and Fahrenheit temperature scales.
- Have a selection of thermometers (Fahrenheit, Celsius, oral, rectal, electronic) available for students to look at.
- Have students practice reading thermometers (Place some under hot water first to have a variety of readings).
- Make giant thermometers using poster board or plywood. Place a slit at either end of the scale and thread elastic or ribbon through. Color the elastic or ribbon part way to represent mercury. Slide the elastic or ribbon back and forth to create different temperature readings for the students to practice reading.
- Have students complete Activity Sheet 2.

Objective 5

- Discuss sites for taking temperature.
- Have students create a chart listing advantages and disadvantages of different temperature sites along with expected normal readings.

Objective 6

- Discuss guidelines for assessing pulse.
- Show students a diagram of the heart to help them understand pulse.

Objective 7

- Discuss factors that influence pulse rate, rhythm, and volume.

- Have students compare one another's pulses for rate, rhythm, and volume.
- Take a student's pulse and then have that student exercise vigorously. Then compare the pulse after exercise to the pulse before exercise.

Objective 8

- Discuss sites for taking pulse.
- Have students find pulse sites on classmates.

Objective 9

- Discuss factors to consider when assessing respiration.
- Show video, *Temperature, Pulse, Respiration.*

Objective 10

- Discuss ways in which respiratory rates may be influenced.

Objective 11

- Discuss assessment of blood pressure.
- Show students a diagram of the heart to help them understand blood pressure.

Objective 12

- Show students mercury and aneroid sphygmomanometers with different cuff sizes.

Objectives 13 and 14

- Discuss sites for taking blood pressure.
- Show video, *Blood Pressure.*
- Have students complete Activity Sheet 1.

APPLICATION

Objective 15

- Discuss Assignment Sheet 1.

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- Provide students with the type of charting materials they will use to record vital signs in the clinical area.
- Have students complete Assignment Sheet 1.

Objective 16

- Discuss Job Sheet 1.
- Have students practice obtaining oral temperatures with a mercury thermometer on one another and axially and rectal temperatures on mannikin.
- Have students complete Job Sheet 1.
- Discuss Job Sheet 2.
- Have students practice taking oral temperatures using an electronic thermometer on one another and axillary and rectal temperatures on mannikin.
- Have students complete Job Sheet 2.
- Discuss Job Sheet 3.
- If tympanic thermometer is available, have students practice obtaining temperatures on one another.
- Have students complete Job Sheet 3.
- Discuss Job Sheet 4.
- Have students practice taking one another's radial pulses.
- Have students complete Job Sheet 4.
- Discuss Job Sheet 5.
- Have students practice taking apical pulse on one another.
- Have students complete Job Sheet 5.
- Discuss Job Sheet 6.
- Have two students work together to take apical/radial pulse of third student.

- Have students complete Job Sheet 6.
- Discuss Job Sheet 7.
- Have students assess peripheral pulses at various sites. Use a Doppler unit if one is available.
- Have students complete Job Sheet 7.
- Discuss Job Sheet 8.
- Have students assess one another's respirations.
- Have students complete Job Sheet 8.
- Discuss Job Sheet 9.
- Have students obtain blood pressure readings of fellow students.
- Have students complete Job Sheet 9.
- Discuss Job Sheet 10.
- Have students practice cleaning mercury thermometers.
- Have students complete Job Sheet 10.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.

- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Blood Pressure*. Available from Medcom Inc., Box 3225, Garden Grove, CA 92642.
- *Temperature, Pulse, Respiration*. Available from Medcom Inc., Box 3225, Garden Grove, CA 92642.

UNIT REFERENCES

- Feury, Diane and David T. Nash. "Hypertension: The Nurse's Role," *RN*, November, 1990. p. 54-59.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures* (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- *Operation Manual*. Intelligent Medical Systems, Carlsbad, California, 1988.

- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques*. The C.V. Mosby Company, St. Louis, Missouri, 1986.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C.V. Mosby Company, St. Louis, Missouri, 1987.
- *Procedures*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1983.
- Sloan, Jamee Reid, *Practical Nursing-Volume 1*. Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.
- Smith, Sandra and Donna Duell. *Clinical Nursing Skills* (2nd ed). Appleton and Lange, Norwalk, Connecticut, 1989.
- Timby, Barbara K. *Clinical Nursing Procedures*. J.B. Lippincott Company, Philadelphia, Pennsylvania, 1989.
- Will, Connie A. and Judith B. Eighmy. *Being a Long-Term Care Nursing Assistant* (2nd ed). Prentice Hall, Englewood Cliffs, New Jersey, 1988.
- Will, Connie A. and Judith B. Eighmy. *Being a Long-Term Care Nursing Assistant* (3rd ed). Prentice Hall, Englewood Cliffs, New Jersey, 1991.

OBJECTIVE 1

Match terms associated with vital signs to their definitions.

- **Afebrile** — Not having an elevated body temperature
- **Aneroid sphygmomanometer** — A blood-pressure measuring device that does not contain liquid
- **Apical pulse** — The pulse heard over the apex of the heart
- **Apnea** — Cessation of breathing
- **Arrhythmia** — Without rhythm or regularity
- **Auscultation** — Listening for sounds within the body with a stethoscope
- **Auscultatory gap** — In blood pressure determination, the presence, then absence of Korotkoff sounds and then their recurrence at a lower level
- **Blood pressure** — The pressure of blood against the walls of the arteries
- **Bradycardia** — Slow pulse rate
- **Bradypnea** — Slow respiratory rate
- **Cheyne-Stokes respirations** — Cyclic respiratory pattern with an increase in rate and depth followed by a decrease and a period of apnea
- **Diastolic pressure** — The lower number of a blood pressure reading, occurring when the left ventricle of the heart is at rest
- **Doppler unit** — An instrument using ultra-sound waves to detect pulse
- **Dyspnea** — Difficulty in breathing
- **Exhalation** — The process of breathing out
- **Expiration** — The process of breathing out

- **Febrile** — Having an elevated temperature
- **Hypertension** — High blood pressure
- **Hyperthermia** — An increase in body temperature
- **Hyperventilation** — A respiratory pattern with increased rate and depth of breathing
- **Hypotension** — Low blood pressure
- **Hypothalamus** — The portion of the brain that controls body temperature
- **Hypothermia** — A decrease in body temperature
- **Hypoventilation** — A respiratory pattern with decreased rate and depth of breathing
- **Inhalation** — The process of breathing in
- **Inspiration** — The process of breathing in
- **Korotkoff's sounds** — Sounds heard through the stethoscope when taking blood pressure
- **Palpation** — Feeling with the hands
- **Peripheral** — Away from the center
- **Pulse** — A fluid wave set up by the beating of the heart that can be felt at various sites over the body and heard over the heart
- **Pulse deficit** — The difference between pulses taken simultaneously at the apical and radial sites
- **Pulse pressure** — The difference between the systolic and diastolic blood pressure
- **Pyrexia** — Elevated body temperature
- **Respiration** — The process of breathing in and out
- **Rhythm** — In determination of pulse, the spacing of beats

- **Sphygmomanometer** — An instrument for measuring blood pressure
- **Stethoscope** — An instrument for auscultating body sounds
- **Systolic pressure** — The higher number of a blood pressure reading, occurring when the left ventricle of the heart is contracting
- **Tachycardia** — Rapid pulse rate
- **Tachypnea** — Rapid respiratory rate

OBJECTIVE 2

Choose the word or phrase to complete statements about body temperature.

Body temperature is a balance between heat lost and heat produced. The area of the brain known as the hypothalamus operates as a thermostat to maintain a balance between heat loss and heat production.

Most body heat is produced by metabolism of food and by exercise. Heat is lost primarily through the skin, through loss of body fluids such as urine and feces, and through the lungs with exhalation. In health, this delicate balance is preserved.

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Heat loss increased by:

- Cold temperatures
- Evaporation from lungs
- Evaporation from skin
- Excreting urine/feces
- Warming inhaled air

Heat production increased by:

- Strong emotions (anger, joy)
- Excercise
- Processing food and using it
- Muscle tension
- Shivering
- Some diseases

Figure **1** Temperature balance

OBJECTIVE 3

Select factors that may influence the body's temperature. Many factors may influence the body's temperature and cause variations.

- **Age** causes some slight variation in expected normal temperatures. Still, temperature is the vital sign with the least amount of variation due to age of the individual.

  Newborns have difficulty maintaining body temperature because of their immature nervous system. The environment can influence their temperature greatly.

  Older infants and children tend to have a slightly higher temperature than adults.

  Older adults tend to have a slightly lower body temperature.

- **Time of day** influences temperature. Lowest temperatures in a 24-hour-period will be in the early morning hours. Highest temperatures will be recorded during the evening hours. People who sleep during the day and work at night will have their peak and low temperatures reversed.
- **Exercise** will increase the body temperature. Shivering raises temperature when the body becomes chilled.
- **Hormones** influence temperature. In women, progesterone secreted at the time of ovulation increases body temperature. The increased estrogen secreted before ovulation decreases temperature. Hormones secreted by the thyroid and adrenal glands also influence temperature.
- **Stress** may cause an elevated body temperature. This is related to hormonal influences during stress.
- **Extremes in environmental temperatures** along with humidity can influence body temperature. That is why patterns of dress change with a change in season.
- **Illness** can cause increases or decreases in temperature. Infections are characterized by an increase in temperature. People with chronic debilitating diseases may have a decreased body temperature.

OBJECTIVE 4

Compare the Celsius and Fahrenheit temperature scales.

Normal body temperature is 98.6 degrees Fahrenheit (F) or 37 degrees Celsius or centigrade (C). Actually we expect a normal range of about 1 degree above or below a Fahrenheit reading and about .5 degree above or below a Celsius reading. Most individuals are familiar with the Fahrenheit scale and it is used in many health care facilities. When a health care facility uses the Celsius scale, the nurse may have to interpret the reading to patients in terms of the more familiar Fahrenheit scale.

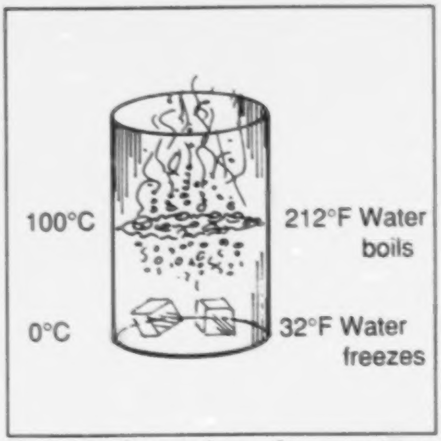
100°C
212°F Water boils
0°C
32°F Water freezes

Figure **2** Comparison of temperatures

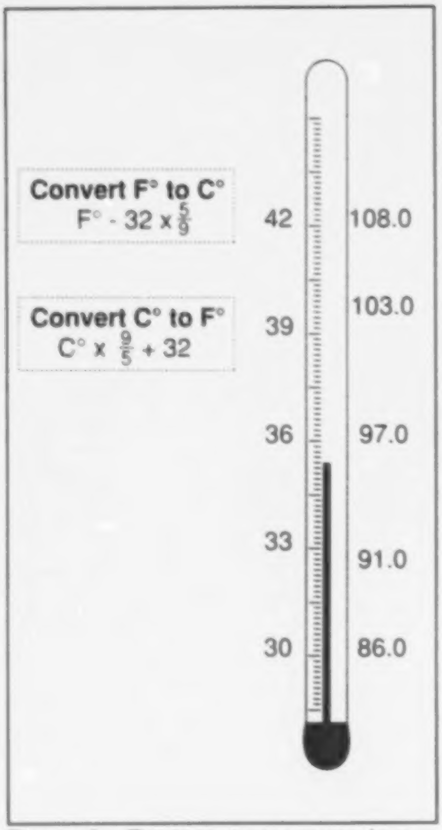
Convert F° to C°
F° - 32 x $\frac{5}{9}$
Convert C° to F°
C° x $\frac{9}{5}$ + 32
42
108.0
39
103.0
36
97.0
33
91.0
30
86.0

Figure **3** Temperature conversion

OBJECTIVE 5 **Distinguish among characteristics of temperature sites.**

Health care facilities may use glass or electronic thermometers to assess temperature. With a glass thermometer, three sites are commonly used. The mouth is the most easily accessible site, making oral temperatures probably the best known route. Rectal and axillary temperatures may also be taken.

When electronic thermometers are used, the oral, rectal, and axillary sites may be chosen. There is also an electronic thermometer which measures temperature at the tympanic membrane. While all the electronic thermometers require less time than the glass thermometers to obtain the temperature, the tympanic thermometer requires a very short time.

Since a variety of sites are available, the nurse needs some information to determine the best site and evaluate the temperature reading obtained.

- **The oral route** requires that the mouth be kept closed with the thermometer under the tongue. Therefore it is not appropriate for infants and small children, unconscious or disoriented patients, individuals with a history of seizures, patients with mouth trauma or oral surgery, or people who must breathe through the mouth. A normal oral temperature is 98.6 degrees F. or 37 degrees C.

- **The rectal route** requires a longer time for accurate measurement. It should not be used for patients with rectal trauma, diarrhea, or for individuals who cannot assume a position where the anus can be visualized for insertion of the thermometer. Measurements of rectal temperature are higher when compared with oral temperatures. A normal rectal temperature is considered to be 99.6 degrees F. or 37.5 degrees C.

- **The axillary route** requires the longest period of time. For that reason, it is somewhat undesirable when only glass thermometers are available. However, the time period is less objectionable when an electronic thermometer is used. It is the least invasive route, but placement of the thermometer may be inaccurate. Axillary temperatures are lower when compared with oral readings. A normal axillary temperature is considered to be 97.6 degrees F or 36.5.

- **The tympanic** electronic thermometer registers in less than two seconds. It can be used for most patients. Readings can be calibrated to correspond with either oral or rectal readings.

Since there is variation in the readings obtained, it is necessary to record the site as well as the numerical value of the temperature. Usually, oral temperatures are recorded without any notation of site. Rectal temperatures are preceded by the letter "R" and axillary temperatures are preceded by "Ax". Some facilities may use a "T" for tympanic. This will help in evaluating the readings.

OBJECTIVE 6 **List three pulse assessments.**

The heart is a muscular pump that supplies blood to all body cells by contracting to force blood through arteries. When the heart contracts or beats, a fluid wave is initiated which can be felt by compressing an artery against a bone. This is called the pulse. Measurement of the pulse helps assess the efficiency of the heart and circulation. Three major assessment factors are considered:

- Rate
- Rhythm
- Volume

OBJECTIVE 7 **Select factors that influence pulse rate, rhythm, and volume.**

Rate

The pulse rate refers to the number of beats per minute. It is influenced by a number of factors.

- **Age** influences the rate, with the pulse rate decreasing from birth to adulthood. Average pulse rates at different ages include:

Newborn	100-160
Age 4	80-120
Adult	60-100

- **Exercise and activity increase** the pulse rate. An opposite effect occurs in individuals who regularly participate in aerobic exercise. Their heart is able to supply blood with fewer beats, resulting in an overall lowered pulse rate.
- **Position** can influence the pulse rate. Lowest rates can be expected when the individual is lying down. The rate increases when sitting and again when standing.
- **The sex of the individual** makes a slight difference in the rate. Males average a slightly slower heart rate than females.

- **Body temperature** affects pulse. When body temperature increases it places an increased demand on the heart for supply of oxygen and nutrients to the cells. The pulse rate then increases. In hypothermia, a decreased rate will be observed.

- **The volume of circulating blood and the components of blood** can alter pulse rate. A decrease in blood volume or in red blood cells causes an increased rate as the heart attempts to supply oxygen to all cells. This means that an increased pulse rate can be an important indicator of blood loss.

- **Stress, emotions and pain** can all increase the heart rate. Everyone can relate to the sudden increase in heart rate when frightened.

- **Various drugs** affect the pulse rate. Preparations such as digitalis are given for the purpose of slowing the heart rate. Sedatives slow the rate while atropine raises the rate. Products containing caffeine and nicotine increase the pulse rate.

Rhythm refers to the spacing of beats. We expect the same amount of space between beats. Such spacing is described as a regular pulse. If spacing between beats is not equal, we describe this as an irregular pulse or an arrhythmia. When an arrhythmia is detected, it should be determined whether the same pattern repeats or whether the pattern is variable.

Volume is the strength or quality of the beats. This is related to the amount of blood pumped with each beat. Normally a pulse should be felt with only slight pressure of the fingertips.

- A **"weak"** pulse (feeble or thready) is difficult to feel and easily obliterated with pressure. When the pulse is also rapid, this could be a serious situation.

- A **"full or bounding"** pulse remains strong even with pressure. A bounding pulse may indicate an increase in fluid volume. This could also be a critical situation.

Some additional considerations may help in assessment. Normal arteries should feel straight and smooth when palpated. They should have an elastic quality. Arteriosclerosis may change the contours of the arteries and make them feel hard.

Palpating pulses bilaterally may add assessment information. Rate, rhythm, and volume should be the same when the corresponding pulse site is palpated on the right and left sides of the body. Differences may indicate disturbances in circulation such as blood clots.

OBJECTIVE 8

Label pulse sites.

There are a number of sites on the body where pulse may be assessed.

The apical pulse is assessed by listening over the apex of the heart with a stethoscope. Two sounds are heard which correspond to one beat. These sounds are often described as "lub-dub". An apical pulse is usually obtained for children under five years old.

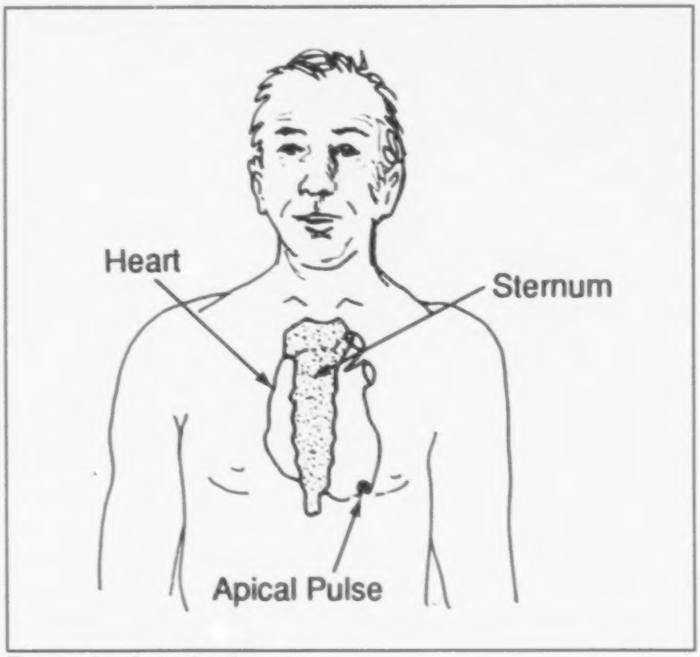

Figure 4 Apical pulse site

The other pulse sites are called peripheral pulses since they are distant from the heart. They are all assessed by palpation. The radial pulse at the wrist is most often assessed. The brachial pulse is most often used for obtaining blood pressure. Other sites are used when it is desirable to assess circulation in another area.

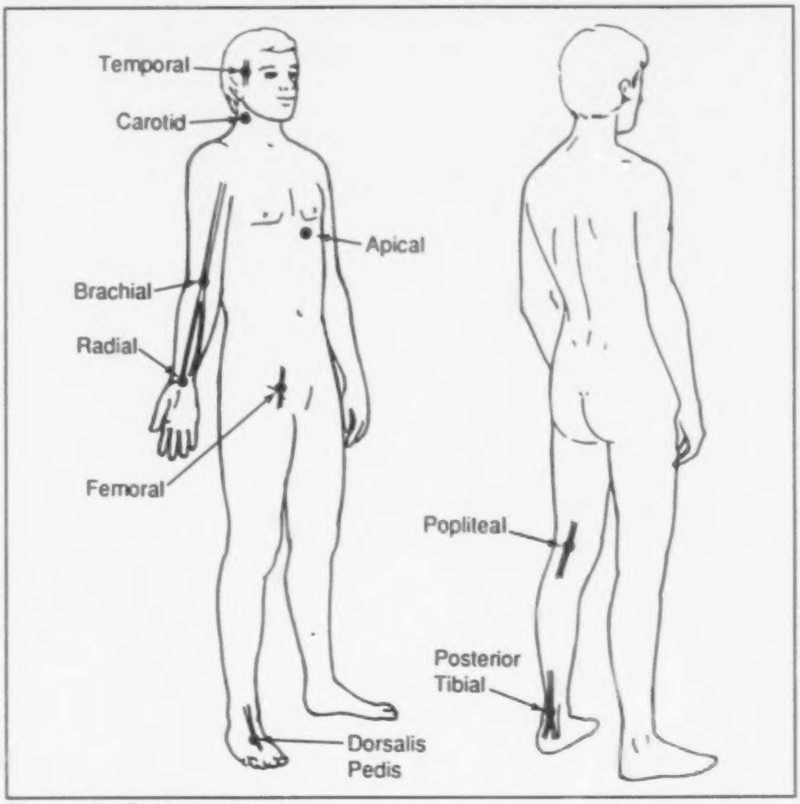
Temporal
Carotid
Apical
Brachial
Radial
Femoral
Popliteal
Posterior Tibial
Dorsalis Pedis

Figure **5** Pulse sites

OBJECTIVE 9

Select factors to consider when assessing respiration.

Respirations supply the body with its primary need: oxygen. Therefore, assessment of respirations may detect life-threatening changes.

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Respiration is a two-part process with inspiration or inhalation bringing air into the lungs. Expiration or exhalation rids the body of carbon dioxide. Both together make up one respiration. Movement of the chest cavity structures can be detected with inspiration and expiration. The rise and fall of the chest, seen or felt, is counted as one respiration.

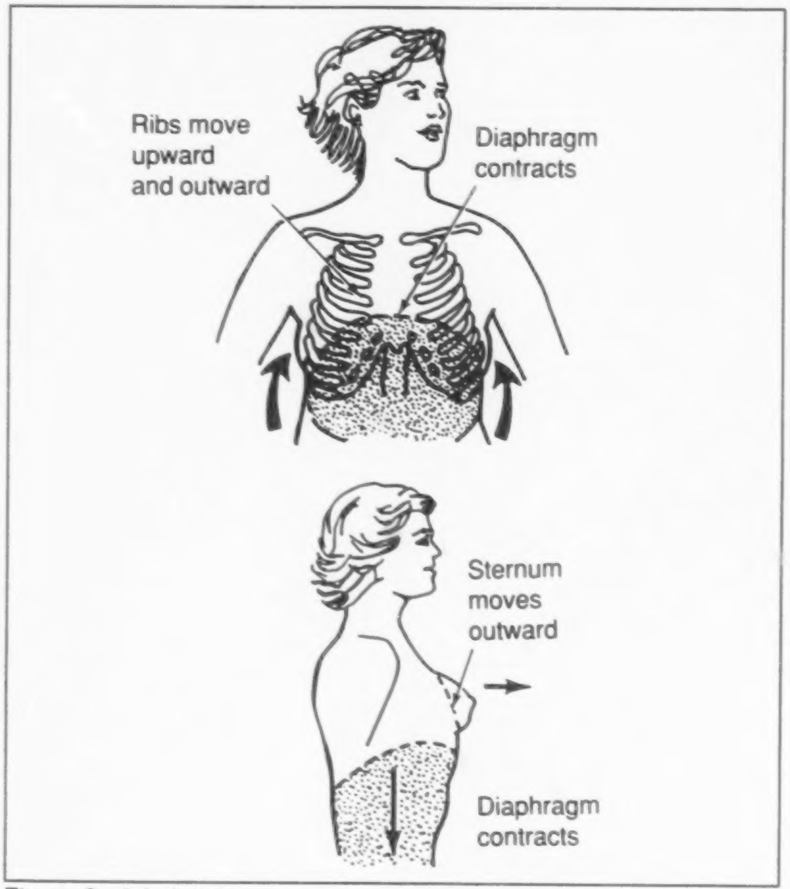
Ribs move upward and outward
Diaphragm contracts
Sternum moves outward
Diaphragm contracts

Figure **6** Inhalation

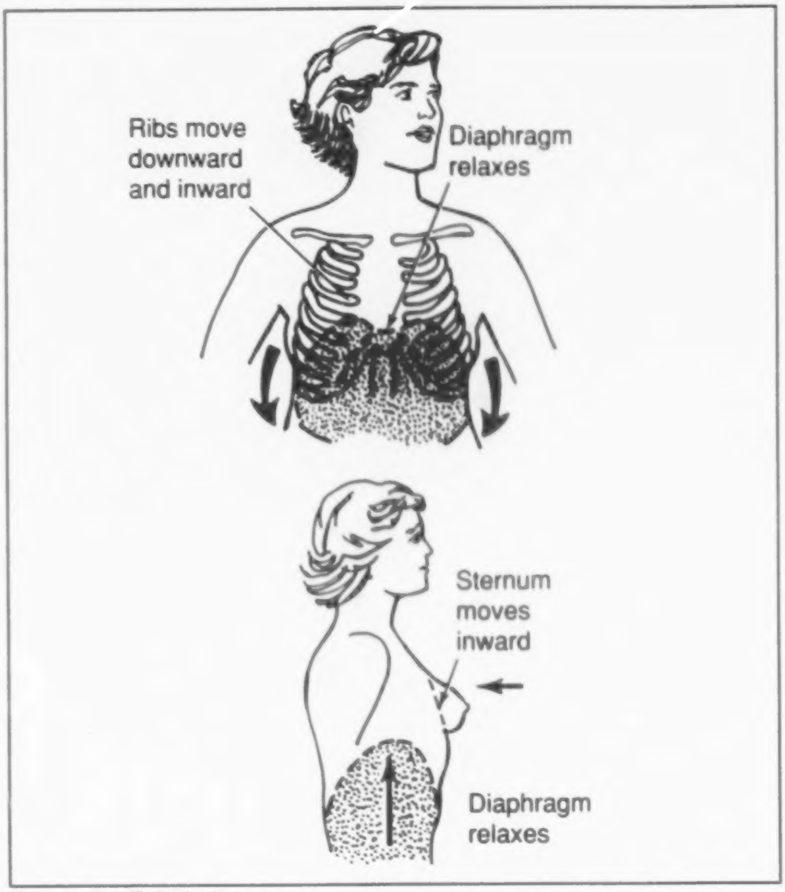
Ribs move downward and inward
Diaphragm relaxes
Sternum moves inward
Diaphragm relaxes

Figure **7** Exhalation

Several factors are considered when assessing respirations:

- **Rate** — Varies with lung capacity and can be influenced by a number of factors.

- **Rhythm** of respiration is considered and described as regular or irregular. Respirations should be evenly spaced. However, an individual has more conscious control over respirations than over pulse. We can hold our breath, speed up or slow down the rate by thinking about it. When the patient knows that the nurse is assessing respirations, some variation in rhythm can be expected. Periodically, the body sighs. A sigh is a deeper breath which expands small airways and alveoli. It is a normal phenomenon, but it disrupts the regular rhythm.

- **Depth** of respirations should be assessed. This refers to the chest movement as seen or felt. Variations from normal are described as deep or shallow.

- **Quality of respirations** — A number of other factors may be observed and considered when assessing respirations. Sometimes these factors together are considered as quality of respirations.

  - **Skin color** may indicate a problem with respirations. Cyanosis or a bluish discoloration of the skin indicates a lack of adequate oxygen supply. The lips and nail beds may first reveal cyanosis.

  - **A change in movements associated with breathing** can signal difficulty. This could include flaring of the nostrils, or use of abdominal or neck muscles. Retraction, or fall of soft tissue around bony areas during respiration, may be observed. Chest movements should also be symmetrical with the same amount of movement on each side of the chest.

  - **Increased respiratory noise** can mean that difficulty is present. Normally, respirations can be described as quiet. Any obstructions or moisture in the respiratory tract creates noise. Some noises can be heard audibly with each breath and others can be heard by auscultation.

  - **Increased anxiety, restlessness, or disorientation** can mean an oxygen deficiency.

OBJECTIVE 10

Choose the word or phrase to complete statements about how respiratory assessment factors may be influenced.

Assessment factors can be influenced by a number of things.

- **Age** influences rate. Since a smaller lung capacity causes a higher respiratory rate, we expect to see a drop in rate from infancy to adulthood. The following range of rates can be expected.

Newborn	30-80
Early childhood	20-40
Late childhood	15-25
Adult	12-20

- **Disease processes** can alter respirations. Chronic lung diseases such as emphysema, acute diseases such as pneumonia, reduction in red blood cells, and pain can affect respiration, especially rate and depth. An elevated body temperature increases respiratory rate.
- **Sex** influences respiratory rate. Males tend to have a larger lung capacity than females. Therefore, males have a slightly lower rate.
- **Exercise** increases respiratory rate and depth.
- **Body position** can affect depth. An upright position and erect posture encourage deeper breathing and more complete lung expansion. A supine position, on the other hand, can lead to shallow respirations.
- **Stress** tends to increase the rate and depth of respirations.
- **Drugs** influence respirations. Narcotics and barbiturates decrease the rate and depth. Other medications may increase the rate.

OBJECTIVE 11

Choose the word or phrase to complete statements about assessing blood pressure.

Blood pressure measures the pressure of blood against the walls of the arteries. Blood pressure is expressed as two numbers. The reading 120/80 is considered an **average** adult reading. The upper number, 120, is the systolic reading or the pressure present when the left ventricle of the heart contracts to force the blood into the arteries. The lower number, 80, is the diastolic reading which occurs as the left ventricle relaxes.

The two numbers reflect the pressure of blood needed to raise a column of mercury 120 mm and 80 mm in height. We say that the standard of measurement for blood pressure is millimeters of mercury (mm Hg).

The difference between the two readings is called the pulse pressure. Our average adult reading of 120/80 would have a pulse pressure of 40. A pulse pressure of 30 - 50 is considered normal.

A wide **range** of blood pressure readings is considered normal. Adult systolic readings could vary from 100 -140 and diastolic readings from 60 - 90 and still be considered in normal range. Blood pressure elevated above normal ranges is called hypertension. Blood pressure below normal ranges is called hypotension.

Blood pressure varies with age. **Average** readings for various ages are listed below. Keep in mind that the normal **range** on either side of these numbers is fairly broad.

Newborn	78/42
1 year	95/65
6-9 years	100/65
10-13 years	110/65
18+ years	120/80

Other factors cause changes in blood pressure.

- **Exercise** increases blood pressure. Like pulse rates, however, regular aerobic exercise can have the effect of lowering blood pressure.

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- **Time of day** may play a part in readings. The lowest blood pressure readings could be expected early in the day and should rise during the day.

- **Sex** of the individual influences blood pressure. Females have a lower blood pressure on the average.

- **Stress, anxiety, fear, and pain** can all raise blood pressure.

- **Medications affect blood pressure.** There are medications intended to lower blood pressure or raise blood pressure. Others influence blood pressure as a side-effect. Antihistamines, steroids and birth control pills tend to raise blood pressure. Caffeine and nicotine can raise blood pressure.

- **Race** has been found to have some effect on blood pressure. A higher percentage of blacks, and particularly black males, have hypertension.

Blood pressure readings can provide us with information about the state of the cardiovascular system. Cardiac output is measured by the systolic reading. This tells us about the ability of the heart to function as a pump. There will be an increase in cardiac output if fever is present or in times of exercise. A decrease may indicate heart disease.

When peripheral vascular resistance is increased, the blood pressure will increase. This is especially true of the diastolic reading. Peripheral resistance can be increased by narrowed blood vessels or blood vessels that have lost their normal elasticity.

A drop in volume of circulating blood will be reflected by a drop in blood pressure. An increase in blood volume will be reflected by an increase in blood pressure. This makes blood pressure an important assessment factor in shock and fluid overload.

OBJECTIVE 12

Choose the word or phrase to complete statements about measuring blood pressure.

Blood pressure is measured using a stethoscope and an instrument called a sphygmomanometer. Mercury, aneroid, and electronic units are available. A cuff with a rubber bladder is attached to the sphygmomanometer.

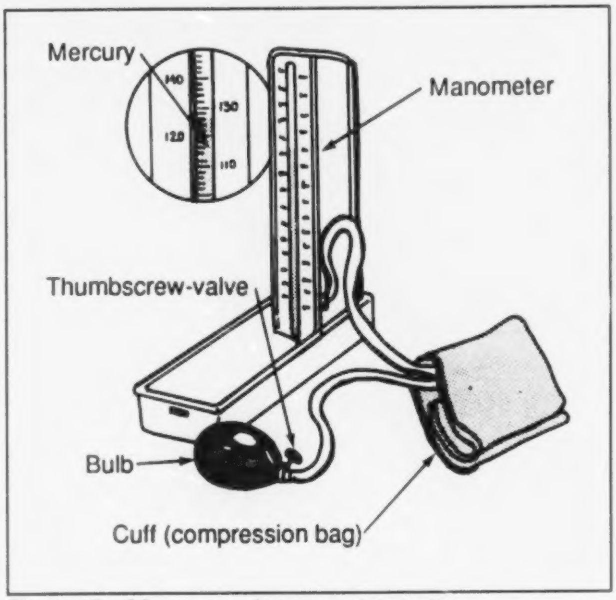

Mercury
140
130
120
110
Manometer
Thumbscrew-valve
Bulb
Cuff (compression bag)

Figure **8** Mercury sphygmomanometer

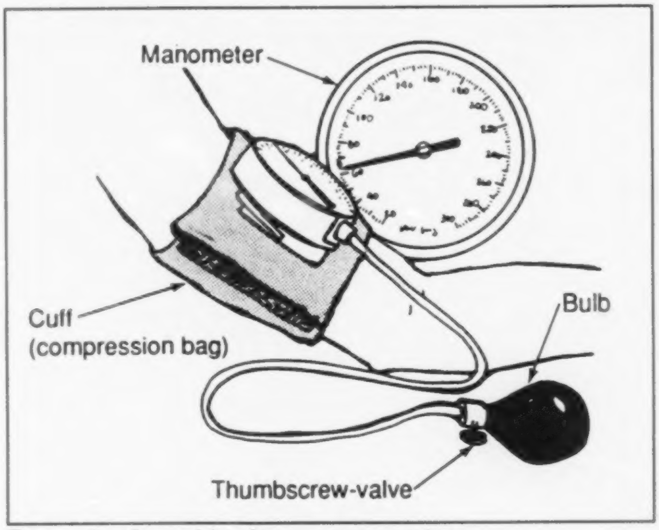

Manometer
Cuff
(compression bag)
Bulb
Thumbscrew-valve

Figure **9** Aneroid sphygmomanometer

The cuff is placed around the upper arm, upper leg, or lower leg and inflated to restrict the flow of blood through an artery. The upper arm is the most common site for assessing blood pressure. As the cuff is deflated, we listen with a stethoscope over an artery for the sounds indicating the return flow of blood. The points on the sphygmomanometer where the sounds begin and end determine the blood pressure reading.

The sounds heard are called Korotkoff sounds. The first sound heard determines the systolic reading. The sounds start faintly, increase in volume and then diminish. The point where the sounds may no longer be heard is the diastolic reading. In some individuals, there is a distinct muffling of sound and then more beats before the sound may no longer be heard. In this case, all three numbers may be recorded. The muffled sound is called the first diastolic reading and the point where sound ends is called the second diastolic reading.

If the correct cuff size is not chosen, the reading will be inaccurate. In choosing cuff size, the bladder is the important consideration. A quick way of assessing cuff size is to determine whether 2/3 of the limb area used (such as the upper arm) is covered by the cuff.

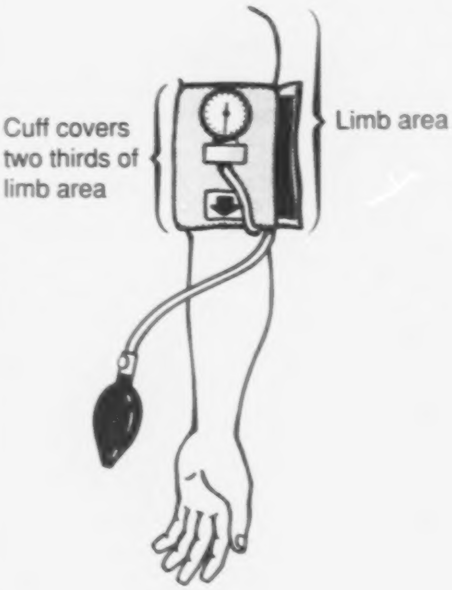


Figure **10a** ⅔ Method

Another check determines if the width of the bladder is equal to 40% of the circumference of the limb, or 20% wider than the diameter of the midpoint of the limb. The length of the bladder should measure twice the width.

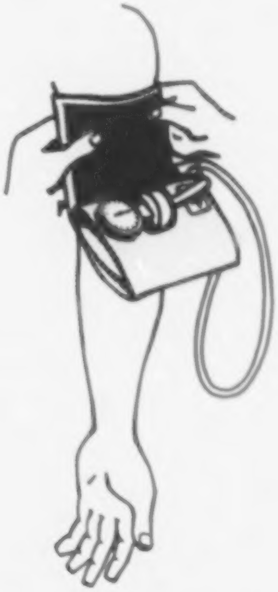


Figure **10b** 40% Method

If the cuff chosen is too large, the reading obtained will be too low. If the cuff is too small, the reading will be too high. Cuffs come in a variety of sizes for the newborn through the obese adult. It is important to use the correct size and to use the same cuff each time readings are compared.

OBJECTIVE 13 **Name the artery normally used for assessing blood pressure.**

Blood pressure is normally measured at the brachial artery.

OBJECTIVE 14 **Match sites for placing the blood pressure cuff with the artery where the blood pressure is assessed.**

To measure blood pressure at the brachial artery, the cuff is placed over the upper arm and the stethoscope is positioned over the brachial artery.

Two sites in the leg may be used. The first is the **popliteal** site which might be used if comparison readings are desired or if the arm cannot be used. In this case, the cuff is placed over the thigh and the stethoscope is positioned over the popliteal artery at the back of the knee. While it is not an everyday occurrence, it is not uncommon to obtain a popliteal blood pressure reading.

It is more rare to obtain a blood pressure reading at the tibial or pedal pulse sites. The cuff is placed over the lower leg and the stethoscope can be positioned over either the posterior tibial site at the medial side of the ankle or the dorsalis pedis site over the dorsal surface of the foot. Tibial or pedal pulse sites might be indicated when there is peripheral vascular disease.

ASSESSING VITAL SIGNS OF AN ISOLATED PATIENT

INTRODUCTION

Even though a patient may require isolation precautions, he still will need a number of other nursing procedures completed. Some variation may be necessary in order to maintain the isolation precautions. The exact measures will depend upon the organism and disease being isolated. Generally, the following measures are for the strictest isolation procedure.

EQUIPMENT

- Isolation cart outside door containing gowns, masks, gloves, isolation bags (usually red), fasteners for bags, labels, marking pen
- Private room with toilet and sink
- Instruction card for door
- Soap dispenser
- Paper towels
- Plastic-lined trash container
- Linen hamper with liner
- Alcohol wipes
- Thermometer (electronic thermometer is sometimes used)
- Stethoscope (one is not always provided for isolation unit)

PROCEDURE

Assessment and Analysis

1. Check medical and nursing diagnoses to determine type of materials needed and specific needs of patient.

2. Check agency policy manual to determine specific procedures.

Planning

3. Assemble all equipment.

   NOTE: Be certain all necessary items are present to avoid coming back out of isolation unit.

Implementation

Entering unit:

4. Wash hands.

5. Don protective gear indicated by type of isolation.

6. Place any equipment being brought into room on clean paper towel to avoid contamination.

   NOTE: Take in only supplies that will be used, since items will have to be discarded or thoroughly cleaned before use by another patient.

7. Upon entering room, remove watch and place on clean paper towel or place in plastic bag.

   NOTE: If wall clock with second hand is available in room, it should be used.

8. If stethoscope must be brought in, hang on door handle away from patient or place on paper towel until ready for use.

9. When using stethoscope, ensure that it will have only minimal contact with patient.

10. After use, place stethoscope on paper towel or other clean surface and swab with alcohol wipe.

11. When leaving room, open plastic bag containing watch and drop watch on clean surface. Pick up after washing hands.

12. Remove protective gear using correct technique.

13. Wash hands.

14. Use clean paper towel to open door.

15. Dispose of towel in receptacle outside room.

16. Wash hands.

Evaluation

17. Evaluate using the following criteria:

    a. Care was given without contaminating persons or equipment.

    b. All contaminated materials were discarded or removed from unit using double-bagging technique.

c. Patient is comfortable and isolation unit is neat and clean.

Documentation

Follow agency policy in documenting vital signs.

ACTIVITY SHEET 1 — VITAL SIGNS

Language Skills
- State ideas clearly

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (thermometer, sphygmomanometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures

VITAL SIGNS ASSESSMENT

NURSE ____________________

PATIENT ____________________

Temperature (oral)__________

Pulse R radial__________ L radial__________

Apical__________ Pedal__________

Describe the rhythm of the pulse (regular, irregular).

Describe the volume (strength, quality) of the pulse (strong, weak, thready, full).

Respirations

Rate__________

Describe the rhythm (regular, irregular).

Describe the depth.

Describe the chest movements.

Describe skin color.

Describe any audible respiratory noise.

Describe the patient's emotional state.

Blood pressure Left__________ Right__________

What is the pulse pressure?

- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

Basic Skills (continued)

VITAL SIGNS

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for:
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing, mathematics, science, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

WRITING SKILLS

— Stating ideas clearly

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (thermometer, sphygmomanometer)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

INTERPERSONAL/RELATING SKILLS

— Analyzing/applying non-verbal communication

— Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty stating ideas clearly:
    - Remind them to organize their thoughts before they begin to write.
    - Instruct them to use simple, concise language.
- If students have difficulty completing forms and records:
    - Examine the structure of the forms being used.
    - Discuss the importance of recording information precisely.
- If students have difficulty using English and metric measures and making measurements:
    - Review the units of measure in the English and metric systems.
    - Determine which measurement system is used on the available equipment and demonstrate its use.
- If students have difficulty using scientific instruments (thermometer, sphygmomanometer), demonstrate the proper use of the instrument.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or a similar text.
- If students have difficulty investigating health issues, discuss the importance of vital signs in monitoring health conditions.

- If students have difficulty analyzing/applying non-verbal communication, discuss some ways in which the patients reveal information non-verbally.

  EXAMPLE: Facial expression Body position
  Tone of voice Mannerisms
  Movements

- If students have difficulty analyzing/applying non-verbal communication, discuss some ways in which the student can convey information non-verbally.

  EXAMPLE: The student can convey concern for the comfort and self-esteem of the patient by providing privacy during a procedure.

- If students have difficulty interacting with or dealing effectively with the clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty mastering specific job task/procedure:

  — Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.

  — Suggest they study each component of the procedure to determine which area is causing difficulty.

  — Review the entire procedure.

  — Team them with proficient students or professionals to practice the procedure.

- If students have difficulty applying safety practices/procedures:

  — Discuss the reasons for, and importance of, safety practices.

  — Review the safety procedures relevant to the specific task.

- If students have difficulty developing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they begin the work.
  - Discuss the role that good work habits and attitudes have in obtaining and retaining employment.
  - Discuss what behaviors constitute good work habits.
  - Make sure the student knows what is expected of him or her.

READING THERMOMETERS

Part I — Reading Fahrenheit thermometers

1. Hold thermometer at eye level. Rotate thermometer until you can clearly see column of mercury.

2. Observe markings, called calibrations, on the scale on upper side of the column of mercury. Remember that each of the long lines represents a full degree and the four short lines represent two-tenths of a degree. Only even-numbered degrees are named on a Fahrenheit clinical thermometer: 96°, 98°, 100°, and so on.

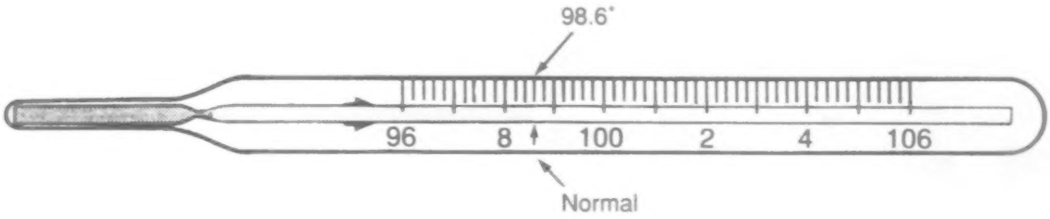
3. If mercury column ends at one of the short lines, look to see which long line is immediately left. That will tell you the degree of temperature. Then count the short lines by two. The temperature is 98.6.

Functional Reading Skills
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Operation and Calculation Skills
- Calculate with decimals

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements



General Science Skills
- Use scientific instruments (thermometer)

Job Acquisition/ Development Skills
- Master specific job task/procedure

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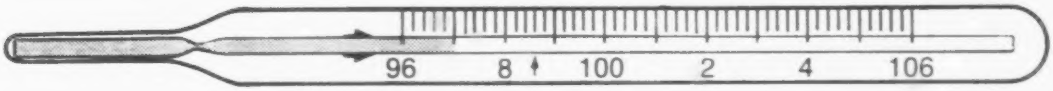
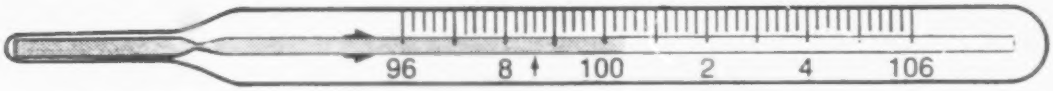
1. Write these thermometer readings in the blanks to the right.

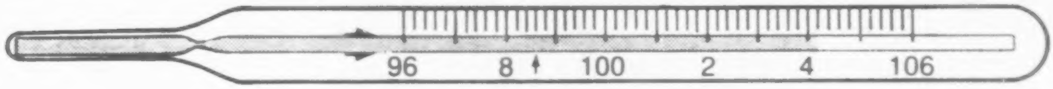
a. ____________


96
8
100
2
4
106

b. ____________

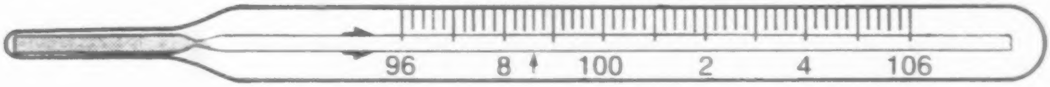

96
8
100
2
4
106

c. ____________

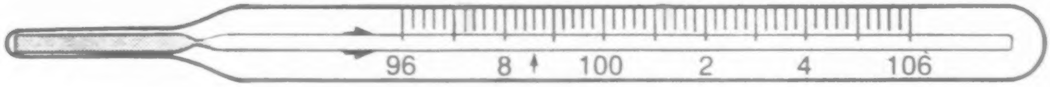

96
8
100
2
4
106

2. Mark the temperature reading on the thermometers below.

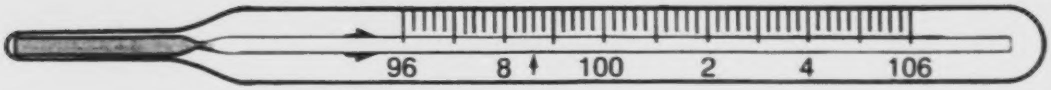
a. 98.6°


96
8
100
2
4
106

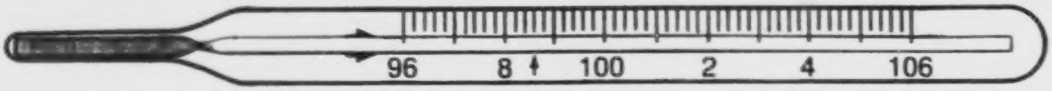
b. 99.2°


96
8
100
2
4
106

c. 101.8°



d. 103°

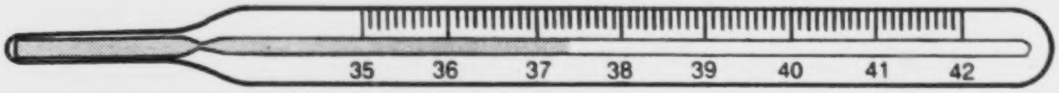


Part II — Reading Celsius thermometers

1. Hold thermometer at eye level. Rotate thermometer until you can clearly see column of mercury.

2. Observe markings, called calibrations, on the scale on upper side of the column of mercury. On the Celsius thermometer, each degree is marked. The shorter lines represent one-tenth of a degree with an intermediate size line marked at five-tenths of each degree.

3. If mercury column ends at one of the short lines, look to see which long line is immediately left. That will tell you the degree of temperature. Then count the short lines by one. Use the intermediate lines to help fix the point. The temperature is 37.4

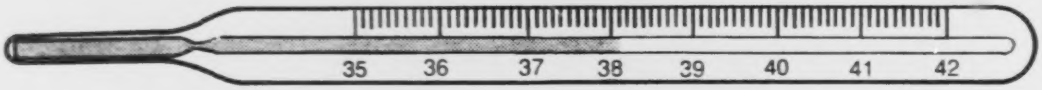


Celsius thermometer

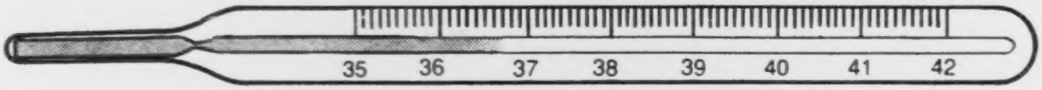
1441

1. Write these thermometer readings in the blanks.

a. ____________

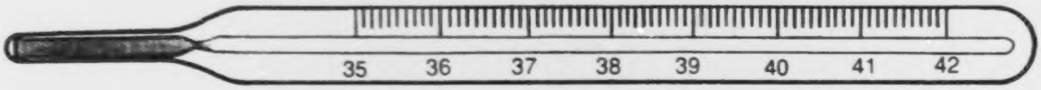

35
36
37
38
39
40
41
42

b. ____________

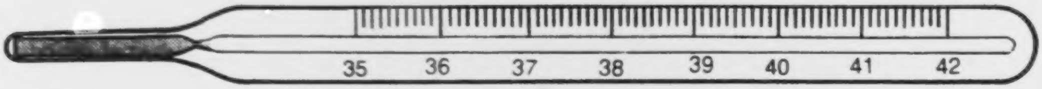

35
36
37
38
39
40
41
42

2. Mark the temperature readings on these thermometers.

a. 37.2°


35
36
37
38
39
40
41
42

b. 39.4°


35
36
37
38
39
40
41
42

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 2

Skill development for: READING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, mathematics, science, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

  READING SKILLS

  - Interpreting graphics and symbols

  MATHEMATICS SKILLS

  - Calculating with decimals
  - Using English and metric measures
  - Making measurements

  SCIENCE SKILLS

  - Using scientific instruments (thermometer)

  EMPLOYABILITY SKILLS

  - Mastering specific job task/procedure

- If students have difficulty interpreting graphics and symbols:

  - Have them examine the graphics and symbols to determine which elements are represented.
  - Instruct them to relate the graphics and symbols to the information in the text.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

ACTIVITY SHEET 1

Answers will vary by student.

ACTIVITY SHEET 2

Part I

1. a. 97
   b. 100.4
   c. 104.2
2. Check to see that correct temperatures have been indicated.

Part II

1. a. 38.1
   b. 36.7
2. Check to see that correct temperatures have been indicated.

VITAL SIGNS

NAME ______________________ SCORE ______

OBJECTIVE 15

Document vital signs.

INTRODUCTION

Vital signs are usually documented on a "graphic sheet" to make it easy to see patterns of change. Temperature is most often placed on a graph, while the other vital signs may be recorded as numerical values. Having all the vital signs together makes it easier to detect developing problems.

It is important to keep the graphic sheet neat and to record the information accurately. Lines connecting readings at different times should be straight and end at the correct value and time. Dates should be filled in before any information is recorded and then each person recording information should verify that the information is recorded on the correct date.

DIRECTIONS

Record the following vital signs on a graphic sheet supplied by your instructor. Follow any special directions supplied by your instructor.

Time	Temp/Pulse/Resp	B.P.
0800	99.2-84-20	120/80
1200	100.4-88-22	126/82
1600	102.6-102-28	132/86
2000	104.2 -128-32	140/90
2400	103.8-130-36	144/90
0400	101.4-120-30	138/88
0800	99-92-24	128/88

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Functional Writing Skills
- Complete forms and records

Data Analysis and Display
- Collect/record data
- Construct graphs

Job Acquisition/ Development Skills
- Master specific job task/procedure

SUGGESTED EVALUATIVE CRITERIA

1.	Temperatures graphed accurately	20 points
2.	Vital signs recorded accurately	20 points
3.	Dates listed	10 points
4.	Information recorded on correct date	10 points
5.	Neatness	20 points
6.	Followed special instructions	20 points
	Total	100 points

INSTRUCTIONAL SUPPLEMENT FOR ASSIGNMENT SHEET 1

Skill development for: WRITING SKILLS
MATHEMATICS SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why writing, mathematics, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Collecting/recording data

— Constructing graphs

EMPLOYABILITY SKILLS

— Mastering a specific job task/procedure

- Emphasize to the students that criteria for grading their assignment will include all of the following:

1. Temperatures graphed accurately
2. Vital signs recorded accurately
3. Dates listed
4. Information recorded on correct date
5. Neatness
6. Followed special instructions

- If students have difficulty collecting/recording data:

— Discuss the importance of recording data accurately.

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  - Examine the main categories of information needed.

    EXAMPLE: Blood pressure, temperature, time, pulse, respiration

- If students have difficulty constructing graphs:
  - Discuss with them the fact that the purpose of graphs is to represent numerical values in a visual form.
  - Discuss what values are represented by the vertical lines.
  - Discuss what values are represented by the horizontal lines.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1.

ASSIGNMENT SHEET 1

Check that students have graphed the data accurately and neatly, that dates are listed and special instructions have been followed.

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JOB SHEET 1 — VITAL SIGNS

OBJECTIVE 16a **Obtain temperatures with mercury thermometers.**

INTRODUCTION

Temperature is frequently assessed both in the health care facility and in the home. Accurate readings depend on the technique used. In addition to obtaining temperature readings, the nurse may be in a position to teach others the correct procedure.

It is common practice to obtain the pulse and respirations while the thermometer is in place to use the waiting time more efficiently. This may not always be possible when obtaining rectal temperatures if the patient needs assistance to maintain the correct position.

EQUIPMENT AND SUPPLIES

- Thermometer(s)

NOTE: A long slender bulb may be used for oral temperatures, while a short stubby bulb should be used for rectal temperatures. Many thermometers have a security tip, mid-way between the extremes. A red dot on the end usually indicates a thermometer is for rectal use.

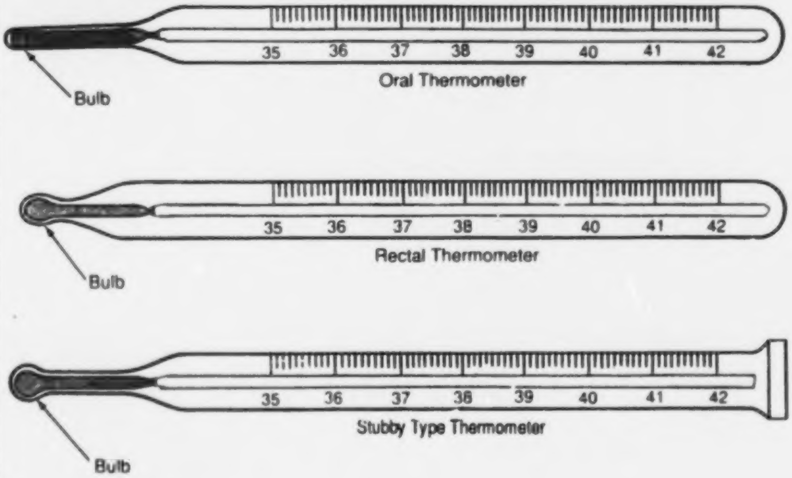

Figure **12** Thermometers

- Disposable plastic sheath
- Tissue
- Lubricant (for rectal temperature)

- Gloves (for rectal temperature)
- Watch with second hand

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (watch, thermometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Assessment and Analysis

1. Check for medical or nursing diagnoses that would alter selection of appropriate site.

2. Determine patient's ability to cooperate in procedure.

3. Determine whether the patient has had anything to eat, drink, or smoke in the last 15-30 minutes.

   NOTE: Oral temperatures will be influenced by temperatures of substances in the mouth within this time period.

4. Observe the skin for a flushed or pale appearance.

5. Feel the skin to determine whether it is warmer or cooler than expected and whether moisture is present.

6. Observe for shivering.

Planning

7. Wash hands.

8. Obtain appropriate thermometer.

9. Obtain all necessary equipment.

10. Explain procedure to patient.

11. Provide privacy for patient.

Implementation

12. If thermometer has been stored in antiseptic solution, rinse with cold running water.

13. Dry with tissue.

14. Check to see that reading is below 95° F. or 36° C.

15. Insert thermometer into disposable sheath.

Interactive Communication Skills

- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills

- Analyze/apply nonverbal communication

Leadership/Influencing Skills

- Develop esteem in self/others

Job Acquisition/Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

16. For oral route:

    a. Place the bulb of the thermometer under the tongue and instruct patient to close lips tightly around thermometer.

    b. Leave in place for 3 minutes, making sure thermometer remains in place.

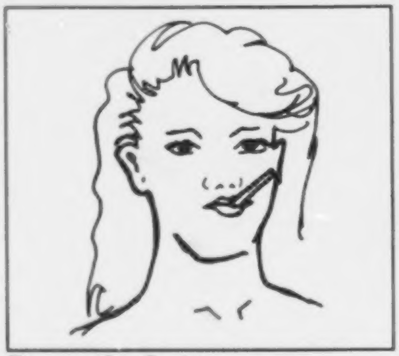

Figure **13a** Oral temperature

17. For rectal route:

    a. Place thermometer on paper towel and apply generous amount of lubricant **or**

       Place thermometer in individual packet of lubricant.

    b. Apply gloves.

    c. Position adult patient on side and infant on abdomen with head turned to side.

    d. Raise linen over buttocks so anus can be seen.

    e. Insert thermometer about 1 1/2 inches for adult, 1 inch for child or 1/2 inch for infant.

    f. **Hold thermometer in place** for 3 - 5 minutes.

CAUTION

RECTAL INJURY POSSIBLE. Thermometer could slip into rectum and cause injury. Hold thermometer in place.

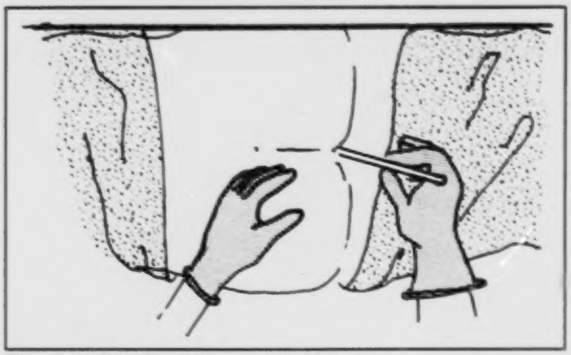

Figure **13b** Rectal temperature

18. For axillary temperature:

    a. Position patient in supine position with skin of axilla exposed.

       NOTE: This will very likely require removing one arm from the gown.

    b. Pat skin dry if any moisture is present.

       NOTE: Rubbing skin will cause friction and produce heat.

    c. Place bulb of thermometer in center of axilla.

    d. Place arm close to body with forearm across chest.

    e. Leave in place for 10 minutes.

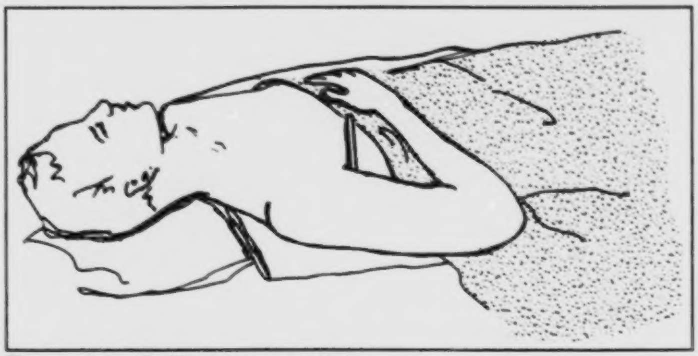

Figure **14** Axillary temperature

19. Remove thermometer.

20. Wipe from stem to bulb end once with tissue, removing sheath.

21. Hold at eye level to read thermometer.

    NOTE: Fahrenheit thermometers are read to the nearest .2 of a degree and Celsius thermometers are read to the nearest .1 of a degree.

22. Place thermometer safely on tissue while assisting patient to comfortable position.

23. For rectal temperature:

    a. Clean any lubricant from anus.

    b. Assist patient to a comfortable position and rearrange covers.

    c. Remove gloves without contaminating self.

24. For axillary temperature:

    a. Assist patient back into gown, if it was partially removed.

    b. Rearrange covers as necessary.

25. Clean thermometer using soap, water, and friction.

26. Shake thermometer down and replace in designated area.

27. Wash hands.

Evaluation

28. Evaluate according to following criteria:

    a. Patient was able to maintain necessary position until accurate reading was obtained.

    b. Reading was within normal limits for route used.

       NOTE: If reading obtained was questionable, it should be rechecked using another thermometer and perhaps another route if the patient's ability to cooperate and assist was questionable.

    c. No injury occurred during assessment of temperature.

Documentation

29. Record:

    a. According to agency policy.

    b. Route used to assess temperature.

    c. Any observations of flushed or pale skin, perspiration, shivering.

    d. Any complaints voiced by patient.

VITAL SIGNS

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (thermometer, watch)

— Investigating/applying principles or anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty interpreting forms and records, examine the structure of the forms being used.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty applying active listening skills:
  - Encourage them to familiarize themselves with the patient's history before beginning the procedure.

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  - Have them practice listening and then repeating the information.

    EXAMPLE: Patient: "I had a cup of coffee a few minutes ago."
    Student: "Since you have had coffee within the last thirty minutes, I will not be able to take your temperature orally."

  - Suggest that they be ready to listen before beginning the communication.
  - Stress the importance of focusing on the speaker.
  - Remind them that maintaining eye contact enhances listening ability.

- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before the instructions are begun.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.
- If students have difficulty applying questioning techniques:
  - Instruct them to have their questions prepared before the communication begins.
  - Stress the importance of accurate questioning to identify subjective symptoms.
- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient with dignity.
  - Discuss the importance of esteem in all areas of life.

- Review communication and interpersonal or relating skills.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheets 1 and 2, and Assignment Sheet 1.

OBJECTIVE 16b **Obtain temperatures with an electronic thermometer.**

INTRODUCTION

Electronic thermometers reduce time spent taking temperature from minutes to seconds. Nurses are able to complete the assessment of temperature faster and patients do not have to maintain positions as long as with mercury thermometers.

Electronic thermometers may operate with batteries or they may come with a recharging base unit. Temperatures will be inaccurate if the equipment is not functioning correctly, therefore, the nurse must first ensure that it is.

EQUIPMENT AND SUPPLIES

- Electronic thermometer
- Correct probe for route

  NOTE: While the same piece of equipment is used for oral, rectal, or axillary temperatures, an interchangeable rectal probe is supplied.

- Disposable sheath or probe cover.

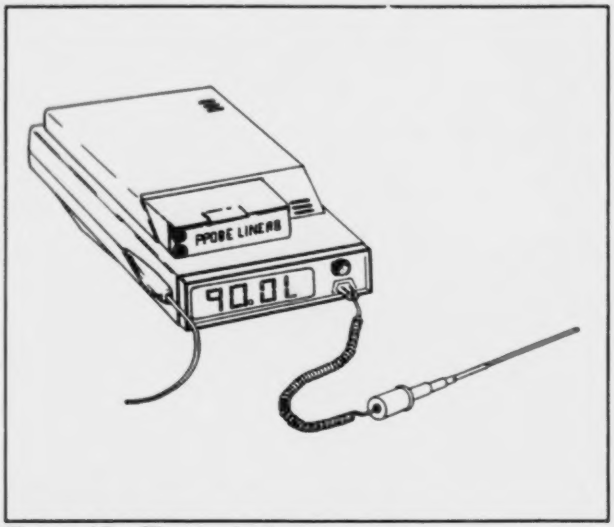

Figure 15 Electronic thermometer

- Lubricant (for rectal temperature)
- Gloves (for rectal temperature)
- Tissue (for rectal temperature)

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (thermometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Assessment and Analysis

1. Check for medical or nursing diagnoses that would alter selection of appropriate site.

2. Determine patient's ability to cooperate in procedure.

3. Determine whether the patient has had anything to eat, drink, or smoke in the last 15-30 minutes.

   NOTE: Oral temperatures will be influenced by temperatures of substances in the mouth within this time period.

4. Observe the skin for a flushed or pale appearance.

5. Feel the skin to determine whether it is warmer or cooler than expected and whether moisture is present.

6. Observe for shivering.

Planning

7. Wash hands.

8. Obtain electronic thermometer and appropriate probe.

9. Obtain all necessary equipment.

10. Explain procedure to patient.

11. Provide privacy for patient.

Implementation

12. Remove temperature probe from storage compartment.

13. Place disposable sheath over probe, making sure it is securely in place.

14. For oral route:

    a. Place the covered probe under the tongue and instruct patient to close lips tightly around thermometer.

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

b. Leave in place until unit signals that the temperature has been obtained, making sure that the probe remains in place.

NOTE: The signal may be auditory or visual. Check manufacturer's instructions.

15. For rectal route:

a. Place probe on paper towel and apply generous amount of lubricant **or**

Place probe in individual packet of lubricant.

b. Apply gloves.

c. Position adult patient on side and infant on abdomen with head turned to side.

d. Raise linen over buttocks so anus can be seen.

e. Insert probe about 1½ inches for adult, 1 inch for child or ½ inch for infant.

f. **Hold thermometer in place** until the unit signals that the temperature has been obtained.

16. For axillary temperature:

a. Position patient in supine position with skin of axilla exposed.

NOTE: This will very likely require removing one arm from the gown.

b. Pat skin dry if any moisture is present.

NOTE: Rubbing skin will cause friction and produce heat.

c. Place the probe in center of axilla.

d. Place the arm close to body with forearm across chest.

e. Leave in place until unit signals that temperature has been obtained.

17. Remove probe.

18. Note digital reading promptly.

    NOTE: Some units display reading for only a brief period while others display reading until probe is replaced.

19. Eject disposable sheath from probe directly into trash container or into paper towel for carrying to trash.

    NOTE: There is usually a button on the end of the probe that triggers the release.

20. Replace probe into storage compartment.

21. For rectal temperature:

    a. Clean any lubricant from anus.

    b. Assist patient to a comfortable position and rearrange covers.

    c. Remove gloves without contaminating self.

22. For axillary temperature:

    a. Assist patient back into gown, if it was partially removed.

    b. Rearrange covers as necessary.

23. Return unit to storage area.

    NOTE: Be certain electronic thermometers with a base unit are stored securely within the unit so recharging may take place.

24. Wash hands.

Evaluation

25. Evaluate according to following criteria:

    a. Patient was able to maintain necessary position until accurate reading was obtained.

b. Reading was within normal limits for route used.

   NOTE: If reading obtained was questionable, it should be rechecked using another thermometer and perhaps another route if the patient's ability to cooperate and assist was questionable.

c. No injury occurred during assessment of temperature.

Document

26. Record:

    a. According to agency policy.

    b. Route used to assess temperature.

    c. Any observations of flushed or pale skin, perspiration, shivering.

    d. Any complaints voiced by patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Refer to Instructional Supplement for Job Sheet 1.

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OBJECTIVE 16c **Obtain temperature with a tympanic thermometer.**

INTRODUCTION

One particular type of electronic thermometer makes taking temperatures extremely fast. Using a tympanic thermometer, the nurse can obtain a temperature reading in 2-5 seconds. The ear is the site used, making it easily accessible for all ages and in almost all conditions with a minimum of effort.

EQUIPMENT AND SUPPLIES

- Tympanic thermometer

  NOTE: Check manufacturer's directions for specific instructions for model used.

- Probe covers

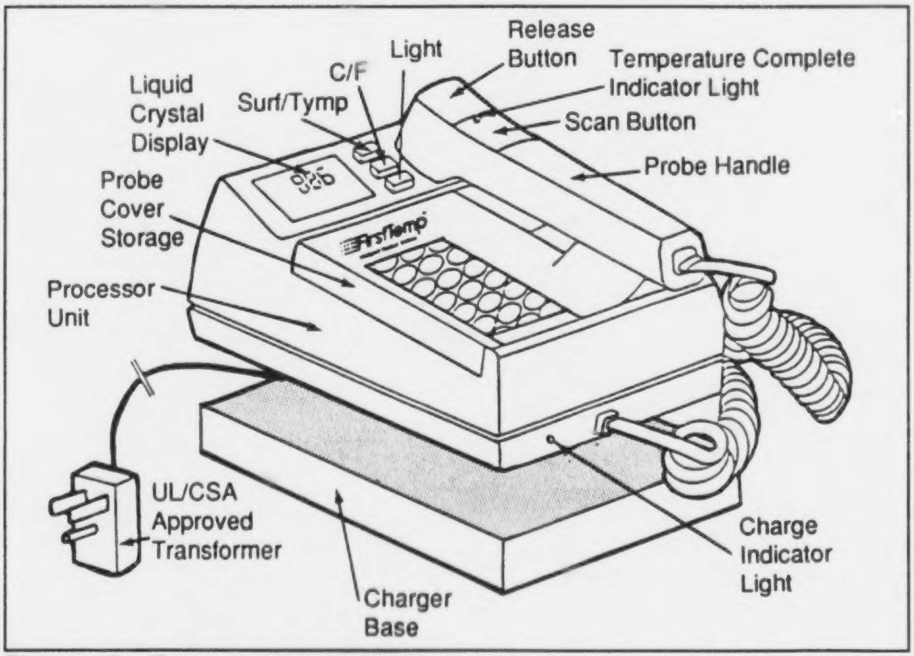
Release Button
Light
C/F
Temperature Complete Indicator Light
Liquid Crystal Display
Surf/Tymp
Scan Button
Probe Handle
Probe Cover Storage
FirstTemp
Processor Unit
UL/CSA Approved Transformer
Charge Indicator Light
Charger Base

Figure 16a Tympanic thermometer
Source: Intelligent Medical Systems, Carlsbad, CA. Used with permission.

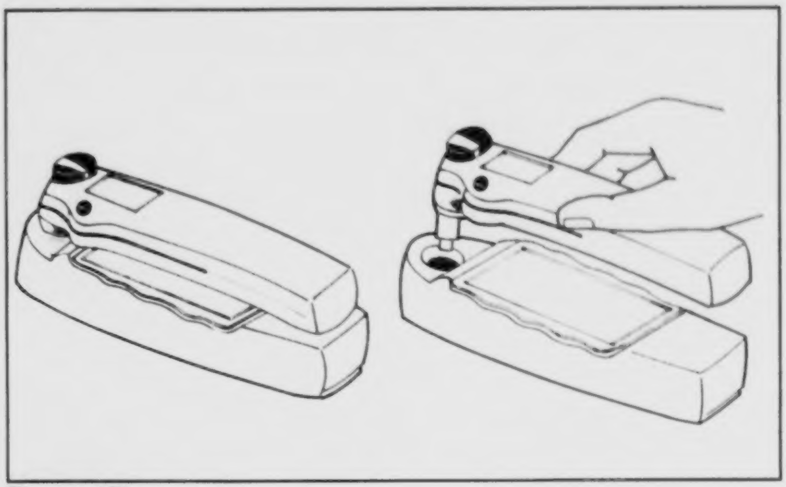

Figure 16b *

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Check for medical or nursing diagnoses that would alter selection of appropriate site.
2. Determine patient's ability to cooperate in procedure.
3. Observe the ears for any drainage.
4. Observe the skin for a flushed or pale appearance.
5. Feel the skin to determine whether it is warmer or cooler than expected and whether moisture is present.
6. Observe for shivering.

Planning

7. Wash hands.
8. Obtain thermometer.
9. Explain procedure to patient.
10. Provide privacy for patient.

*Source: Intelligent Medical Systems, Carlsbad, CA. Used with permission.

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General Science Skills
- Use scientific instruments (thermometer)

Implementation

11. Remove probe from storage.

12. Place probe cover on probe.

13. Gently restrain head with one hand held alongside head.

14. Insert probe into ear canal just enough to seal opening.

CAUTION

EAR INJURY POSSIBLE. Probe that is forced into ear canal can cause patient pain and injury. Do not force probe into patient's ear.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

15. Press button or switch to activate unit or follow manufacturer's directions for specific unit used.

16. When unit signals temperature has been obtained, remove probe from ear.

17. Read temperature on display panel.

18. Eject probe cover from unit into trash receptacle or on to paper towel for transport to trash.

19. Replace probe in storage position.

20. Store unit in appropriate area, making sure it is stored correctly for recharging.

Evaluation

21. Evaluate according to following criteria:

    a. Patient was able to maintain necessary position until accurate reading was obtained.

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/ patients

b. Reading was within normal limits for route used.

NOTE: If reading obtained was questionable, it should be rechecked using another thermometer and perhaps another route if the patient's ability to cooperate and assist was questionable.

c. No injury occurred during assessment of temperature.

Documentation

22. Record:

a. According to agency policy.

b. Route used to assess temperature.

c. Any observations of flushed or pale skin, perspiration, shivering.

d. Any complaints voiced by patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Refer to Instructional Supplement for Job Sheet 1.

OBJECTIVE 16d

Assess radial pulse.

INTRODUCTION

The radial artery is the most common site for pulse assessment. It is readily accessible with a minimum of effort for nurse and patient. It is easy to teach patients to assess their own radial pulse if they must learn this skill to monitor their health status.

It is common practice to assess respirations following the radial pulse, therefore the nurse's hand should be placed in the position for assessing pulse and respiration. In this way, the patient is not so acutely aware that respirations are being counted.

EQUIPMENT AND SUPPLIES

- Watch with second hand

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Note medical and nursing diagnoses that would influence pulse.
2. Note accessibility of radial artery.
3. Note skin color and warmth and color of nailbeds.
4. Check previous pulse rates.
5. Determine patient's activity prior to assessment of pulse.

Planning

6. Wash hands.
7. Explain procedure to patient.

Implementation

8. Place patient's wrist in relaxed, well-supported position with wrist extended and palm down.

   NOTE: It is wise to place the forearm across the chest so that respirations may be felt and seen immediately after counting the pulse.

General Science Skills
- Use scientific instruments (watch)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures

9. Place tips of first three fingers over radial artery located along thumb side of patient's wrist.

   NOTE: Avoid using the thumb to palpate the pulse. A pulse may be detected in the thumb, causing the nurse to count his/her own pulse rather than the patient's pulse.

10. Press lightly until pulse can be felt.

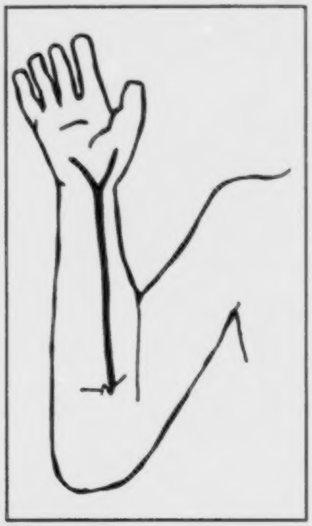

Figure **17**
Radial artery position

11. When pulse is felt, check watch and count for a full minute.

    NOTE: When pulse is regular, the nurse may wish to count for 30 seconds and multiply by two to obtain the rate for one minute.

12. Assess regularity or irregularity of pulse.

13. Assess volume or strength of pulse.

14. Assist patient in resuming comfortable position of arm, if necessary.

15. Wash hands.

- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

Evaluation

16. Evaluate according to following criteria:

    a. Rate is within normal limits for age.

    b. Pulse is regular.

    c. Pulse is strong and easily palpated.

    d. There are no changes in skin color or temperature or nailbeds which would indicate circulatory problems.

Documentation

17. Record:

    a. According to agency policy.

    b. Rate.

    c. Rhythm and volume, if there is deviation from normal.

    d. Any change in skin color or temperature.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 5 — VITAL SIGNS — XI

OBJECTIVE 16e **Assess apical pulse.**

INTRODUCTION

The apical pulse is obtained by auscultation or listening with a stethoscope. It is more accurate and reveals more information than the palpated pulse. Infants and small children should always have apical pulse assessed because of the difficulty in obtaining an accurate pulse by palpation.

EQUIPMENT AND SUPPLIES

- Stethoscope
- Alcohol swabs
- Watch with second hand

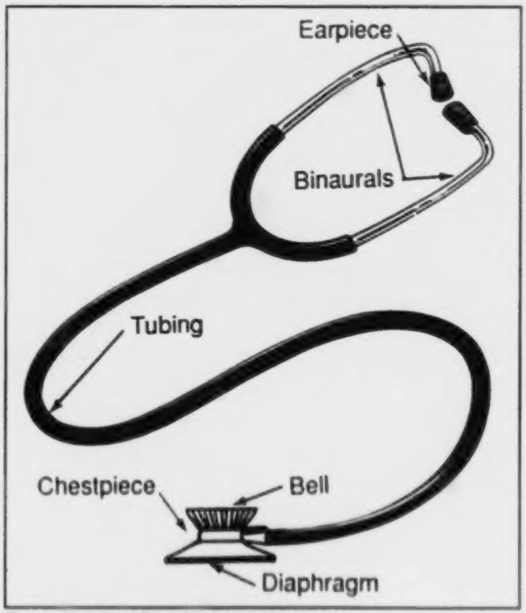

Figure **18** Stethoscope

PROCEDURE

Assessment and Analysis

1. Check for medical or nursing diagnoses that would alter apical pulse.
2. Check for medications that would alter apical pulse.

Functional Reading Skills
- Interpret forms and records

- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (watch)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Planning

3. Wash hands.

4. Obtain equipment.

5. Explain procedure to patient.

6. Provide privacy.

7. Clean earpieces and diaphragm of stethoscope with alcohol swabs.

Implementation

8. Have patient assume supine or sitting position.

9. Remove linens or clothing to expose left side of chest.

10. Warm the stethoscope diaphragm by holding it against the palm of the hand for a few seconds.

11. Place the stethoscope on the chest to the left of the sternum and below the nipple.

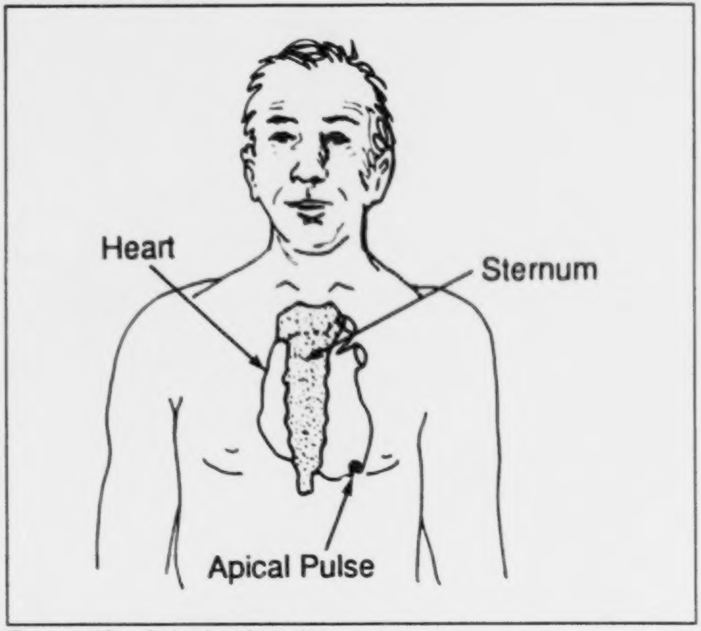

Figure 19 Apical pulse site

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Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/ patients

12. Listen for the "lub-dub" sound of the apical pulse.

    NOTE: The two sounds make up one beat.

13. Count the apical pulse rate for one minute.

14. Assess regularity or irregularity of apical pulse.

15. Assess volume of apical pulse.

16. Replace clothing and bedding and assist patient to comfortable position.

17. Wash hands.

Evaluation

18. Evaluate according to following criteria:

    a. Rate is within normal limits for age.

    b. Apical pulse is regular.

    c. Apical pulse is strong.

    d. No extra sounds are heard.

    e. There is no difficulty in assessing pulse.

Documentation

19. Record:

    a. According to policy.

    b. Rate.

    c. Rhythm.

    d. Volume.

    e. Any extra sounds heard.

    f. Any difficulty in obtaining apical pulse.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (watch, stethoscope)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with customers/clients/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheets 1 and 2, Assignment Sheet 1, and Job Sheet 1.

JOB SHEET 6 VITAL SIGNS XI

OBJECTIVE 16f **Assess apical/radial pulse.**

INTRODUCTION

In some disorders of the cardiovascular system, there is a discrepancy between the rates of the apical and radial pulses. The two should be the same. If there is a question, two nurses may count the two pulses at the same time to accurately determine the agreement between rates. If there is a difference between the rates at the two sites, it is known as a pulse deficit.

EQUIPMENT AND SUPPLIES

- Stethoscope
- Alcohol swabs
- Watch with second hand

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (watch)

Assessment and Analysis

1. Check for medical or nursing diagnoses that would alter apical or radial pulses.
2. Check for medications that would alter pulse rates.

Planning

3. Wash hands.
4. Obtain equipment.
5. Enlist help of second nurse.
6. Explain procedure to patient.
7. Provide privacy.
8. Clean earpieces and diaphragm of stethoscope with alcohol swabs.

Implementation

9. Place patient in supine position with wrist extended and palm down in relaxed position.
10. Remove linens or clothing to expose left side of chest.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients
- Communicate with co-workers

General Relating Skills
- Interact with co-workers
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with co-workers
- Deal effectively with customers/clients/patients

11. First nurse should warm the stethoscope diaphragm by holding it against the palm of the hand for a few seconds.

12. Place the stethoscope on the chest to the left of the sternum and below the nipple to auscultate apical pulse.

13. Second nurse should palpate radial artery for pulse.

14. On signal, using the same watch, both nurses should count pulses for one minute.

15. Replace clothing and bedding and assist patient to comfortable position.

16. Wash hands.

Evaluation

17. Evaluate according to following criteria:

    a. Comparison of apical and radial rates are the same.

       NOTE: There may be a variation of a few beats due to human factor.

    b. Both rates are within normal limits for age.

    c. Both pulses are regular.

    d. Both pulses are strong.

    e. No extra sounds are heard in apical pulse.

    f. There is no difficulty in assessing either pulse.

Documentation

18. Record:

    a. According to policy.

    b. Rate of both pulses.

    c. Rhythm of both pulses.

    d. Volume of both pulses.

e. Any extra sounds heard in apical pulse.

f. Any difficulty in obtaining either pulse.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instrument (watch, stethoscope)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

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ORAL COMMUNICATION SKILLS

- Giving/following oral directions
- Communicating with clients/customers/patients
- Communicating with co-workers

INTERPERSONAL/RELATING SKILLS

- Interacting with clients/customers/patients
- Interacting with co-worker
- Developing esteem in self/others

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Practicing good work habits/attitudes
- Dealing effectively with co-workers
- Dealing effectively with customers/clients/patients

- If students have difficulty communicating with, interacting with, or dealing effectively with co-workers:
  - Review communication and interpersonal or relating skills. Define each person's role in the procedure.
  - Discuss the importance of positive working relationships.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1.

OBJECTIVE 16g

Assess peripheral pulses with and without doppler unit.

INTRODUCTION

Assessment of peripheral pulses gives us useful information about the status of the circulatory system. When we want to know if circulation is adequate in an area of the body, we palpate the pulse for that area.

If it is not possible to palpate the pulse, a doppler ultrasound unit may be used to detect the flow of blood through a blood vessel. The flow of blood is translated to an audible sound. This instrument can be very useful in assessing circulation.

EQUIPMENT AND SUPPLIES

- Watch with second hand
- Doppler unit

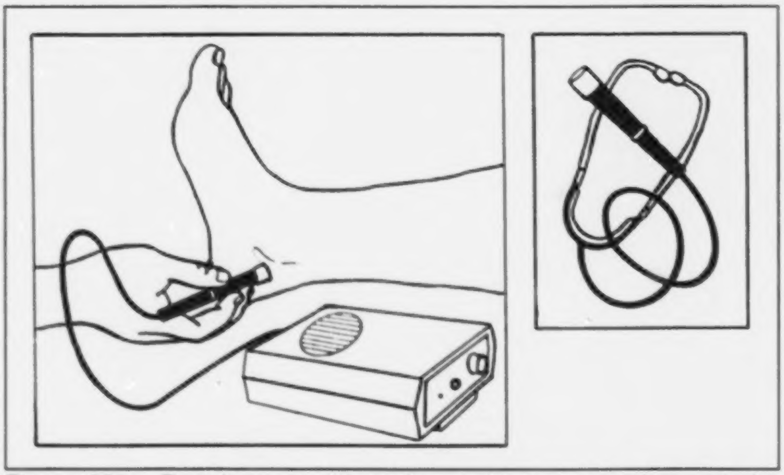

Figure 20* Doppler unit with probe positioned over the posterior tibial.

NOTE: Some units are connected to a stethoscope, others transmit the sound to the air. Read manufacturer's instructions for specific operation of each unit.

- Transmission gel
- Tissue

---

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PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (watch, doppler unit)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions

Assessment and Analysis

1. Note medical and nursing diagnosis that would influence pulse.
2. Note skin color and warmth and color of nailbeds on extremity to be assessed.
3. Note the presence of any edema on the extremity to be assessed.

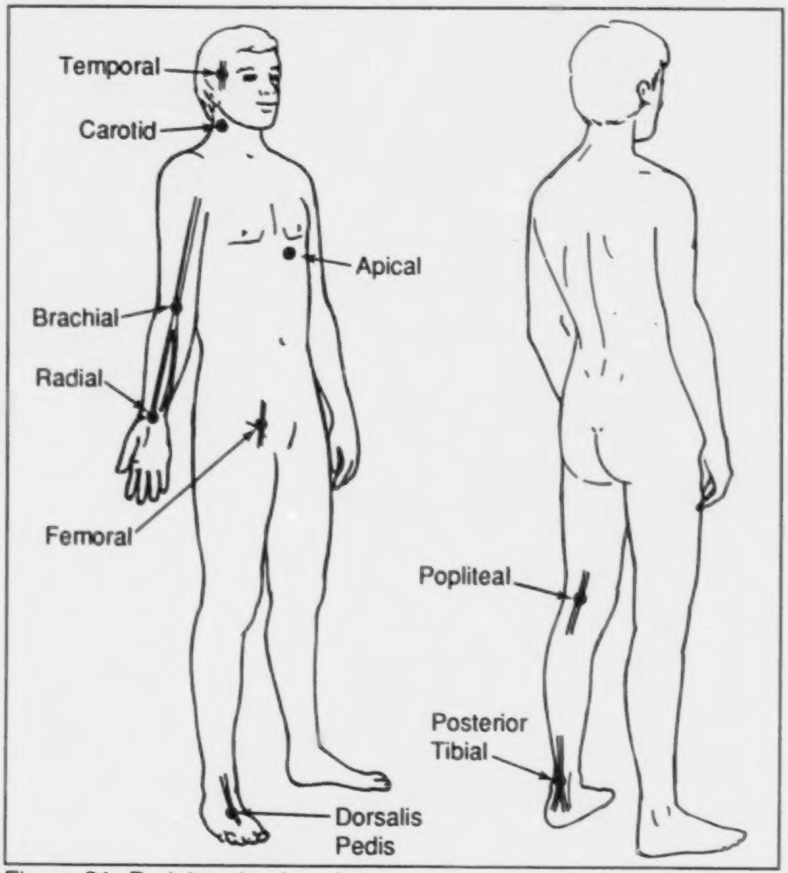

Figure **21** Peripheral pulse sites

Planning

4. Wash hands.

- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

5. Obtain equipment.

6. Explain procedure to patient.

Implementation

7. Place extremity to be assessed in relaxed position with pulse site exposed.

8. To palpate peripheral pulse:

    a. Place tips of first three fingers over artery at site to be assessed.

    NOTE: Avoid using thumb to palpate the pulse. A pulse may be detected in the thumb, causing the nurse to count his/her own pulse rather than the patient's pulse.

    b. Press lightly until pulse can be felt.

9. To assess pulse with doppler ultrasound unit:

    a. Place gel either on skin or on probe tip.

    NOTE: Sound does not transmit well through air, so the gel is used to amplify the sound.

    b. Turn on unit.

    c. Place probe against pulse site at a 45° angle, using light pressure and rolling movements to detect pulse.

    NOTE: Too much pressure will obliterate pulse.

10. When pulse is felt or heard, check watch and count for a full minute.

    NOTE: When pulse is regular, the nurse may wish to count for 30 seconds and multiply by two to obtain the rate for one minute.

11. Assess regularity or irregularity of pulse.

12. Assess volume or strength of pulse.

13. Wipe off gel, if doppler unit was used.

14. Assist patient in resuming comfortable position, if necessary.

15. Wash hands.

Evaluation

16. Evaluate according to following criteria:

    a. Rate is within normal limits for age.

    b. Pulse is regular.

    c. Pulse is strong and easily palpated or heard.

    d. There are no changes in skin color or temperature or in nailbeds that indicate circulatory problems.

Documentation

17. Record:

    a. According to agency policy.

    b. Rate.

    c. Rhythm and volume, if there is deviation from normal.

    d. Any change in skin color or temperature.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 7

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing records and forms

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (watch, doppler unit)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

- — Giving/following oral directions
- — Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- — Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- — Mastering specific job task/procedure
- — Applying safety practices/procedures
- — Practicing good work habits/attitudes
- — Dealing effectively with customers/clients/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheets 1 and 2, Assignment Sheet 1, and Job Sheet 1.

OBJECTIVE 16h

Assess respirations.

INTRODUCTION

There is some conscious control over respiratory rate, depth, and rhythm. Respirations are usually assessed immediately after assessing the radial pulse when taking vital signs for the older child or adult. This technique does not make it so obvious that the respirations are being counted and thus helps obtain a better picture of what respirations are really like. They are assessed first in an infant or small child because the other vital signs require more manipulation which could agitate the child, causing crying and changes in the respiratory rate.

EQUIPMENT AND SUPPLIES

- Watch with second hand

PROCEDURES

Assessment and Analysis

1. Check for medical or nursing diagnoses that would alter respirations.
2. Assess skin color.
3. Listen for noises associated with respiration.
4. Observe movements of chest and abdomen.
5. Look for symmetry of chest.
6. Observe effect of position on respirations.

Planning

7. Wash hands.
8. Explain procedure to patient.

   NOTE: It is best to explain that the pulse is being taken and follow with observation of respirations.
9. Provide privacy.
10. Assist patient to assume supine or sitting position.

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (watch)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

Implementation

11. Place patient's forearm across chest and hold wrist as for taking pulse.

    NOTE: This allows the nurse to feel as well as see the respirations.

12. Count respirations for one full minute.

    NOTE: If rhythm is regular, respirations may be counted for 30 seconds and multiplied by two.

13. Observe rhythm of respirations.

14. Observe depth of respirations.

15. Assist patient to assume comfortable position.

16. Wash hands.

Evaluation

17. Evaluate according to following criteria:

    a. Rate is within normal limits for age.

    b. Rhythm is regular.

    c. Depth is within normal limits.

    d. There is no noise or only very slight sound of air exchange associated with breathing.

    e. Chest movements are equal bilaterally.

    f. There is no excess movement of chest, nostrils, and neck.

    g. Skin color is not abnormal.

    h. Patient can breathe equally well in all positions.

Documentation

18. Record:

    a. According to agency policy.

    b. Rate.

    c. Rhythm.

    d. Depth.

    e. Any unusual noises heard.

    f. Any excess movements associated with respirations.

    g. Any asymmetrical movements.

    h. Any difficulty breathing in various positions.

    i. Any changes in skin color, such as cyanosis or pallor.

    j. Any complaints of difficulty in breathing.

VITAL SIGNS

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 8

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting/recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (watch)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

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ORAL COMMUNICATION

— Giving/following oral directions

— Analyzing/applying non-verbal communication

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Analyzing/applying non-verbal communication

— Interacting with clients/customers/patients

— Developing esteem in self/others

EMPLOYABILITY SKILLS

— Mastering specific job task/procedure

— Applying safety practices/procedures

— Practicing good work habits/attitudes

— Dealing effectively with customers/clients/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Activity Sheet 1, Assignment Sheet 1, and Job Sheet 1.

OBJECTIVE 16i

Obtain blood pressure reading.

INTRODUCTION

Learning to assess blood pressure is perhaps the most complex technique in assessing vital signs. The equipment and technique to measure blood pressure must be mastered. Accurate blood pressure readings are essential, making it important to follow each step precisely and practice until the task is mastered.

This job sheet discusses blood pressure determination at the brachial artery, since this is the site most often used. Most considerations are the same for sites in the lower extremities.

EQUIPMENT AND SUPPLIES

- Sphygmomanometer (Mercury, aneroid, or electronic)

  NOTE: Exact instructions for electronic models will vary. Consult manufacturer's instructions for alterations in technique.

- Stethoscope

  NOTE: Electronic sphygmomanometers do not require stethoscopes.

- Alcohol swabs

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Assessment and Analysis

1. Note any medical or nursing diagnoses that would alter technique or readings.
2. Assess possible sites for obtaining blood pressure.

CAUTION

Blood pressure should not be obtained in a limb where:
a. IV fluids are infusing
b. there is an arteriovenous shunt
c. there is a cast or bulky bandage
d. there is trauma or paralysis, or
e. on the side of the body where breast or axillary surgery has been performed.

- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (sphygmomanometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

3. Assess patient's ability to cooperate in procedure.

4. Check patient's recent activities for factors that could alter reading (strenuous activity, smoking, consuming caffeine would be included).

5. Note any complaints that might indicate change in blood pressure reading, such as weakness, dizziness, headache, or blurred vision.

Planning

6. Wash hands.

7. Obtain equipment.

8. Clean earpieces and diaphragm of stethoscope.

9. Determine appropriate cuff size.

10. Explain procedure to patient.

11. Provide privacy.

12. Remove any clothing that would interfere with obtaining reading.

    NOTE: Sleeves which are rolled up might cause a constriction of arterial flow and influence the outcome of the procedure.

Implementation

13. Place arm with palm up and forearm well-supported at heart level.

14. Place deflated cuff securely around arm with lower edge 1 inch above antecubital area.

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Develop esteem in self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Practice good work habits/attitudes
- Deal effectively with customers/clients/patients

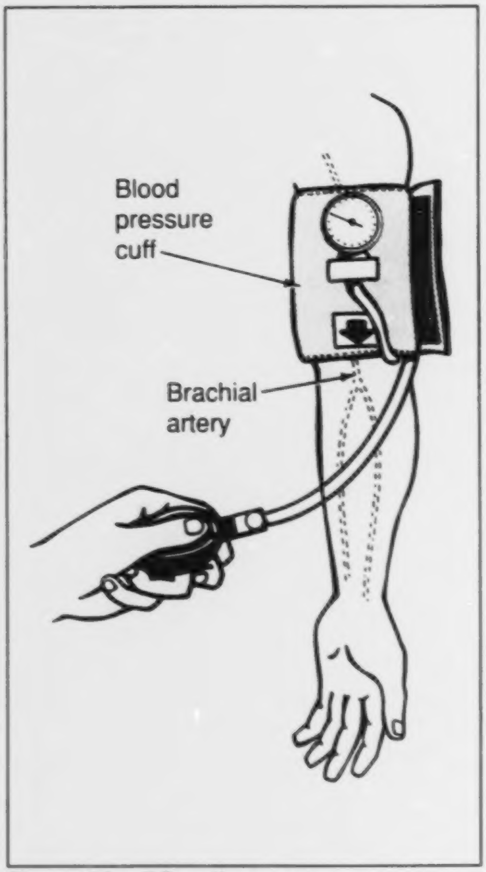

Figure **22** BP cuff on arm

15. Position gauge of aneroid cuff where it can be easily seen or mercury gauge at nurse's eye level.

16. Close thumb screw on cuff.

17. Palpate brachial artery.

    NOTE: Brachial artery will be palpated on little finger side of arm.

18. Obtain maximum inflation level by inflating cuff to point where brachial pulse disappears and then inflate 30 mm Hg higher.

    NOTE: In some individuals, it is very difficult to palpate the brachial artery while inflating the cuff. The radial artery may be used if necessary. This preliminary determination of systolic reading is necessary because some individuals have an auscultatory gap.

19. Immediately position diaphragm of stethoscope over brachial artery and hold in place with one hand.

20. With other hand, open thumb screw and slowly deflate cuff at rate of 2-3 mm Hg per second while listening.

21. Note point where Korotkoff sounds are first heard for systolic reading.

22. Continue listening and allowing cuff to deflate until sounds are no longer heard. Note this point as the diastolic reading.

23. Open thumb screw completely and allow cuff to deflate.

24. Remove cuff and store in appropriate place unless blood pressure will be measured again soon.

25. Assist patient to comfortable position and replace clothing and covers as needed.

Evaluation

26. Evaluate according to following criteria:

    a. Blood pressure reading is within normal limits for age.

    b. Blood pressure has not changed significantly from previous determinations.

    c. If blood pressure must be reassessed, wait 1 or 2 minutes to allow circulation to be reestablished.

    d. Consider need for taking blood pressure in another extremity or with the patient in another position.

    e. Consider need for using doppler unit to assess Korotkoff sounds.

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Document

27. Record:

    a. According to agency policy.

    b. Any difficulty in obtaining reading.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 9

Refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 10 — VITAL SIGNS — XI

OBJECTIVE 16j

Clean mercury thermometer.

INTRODUCTION

When mercury thermometers are used, they must be cleaned to avoid transfer of microorganisms from one individual to another. Even when disposable sheaths are used there is always the danger that microscopic holes are present, compromising their protection. The following procedure could be used for cleaning one thermometer or a large number of thermometers. Agency policy will dictate the solutions used.

Thermometers used in the home must be cleaned. It would be appropriate for the nurse to instruct people in the correct technique.

EQUIPMENT AND SUPPLIES

- Tissue
- Soap
- Running water
- Gloves
- Container with antiseptic or disinfectant solution or storage container

PROCEDURE

Functional Reading Skills
- Follow written instructions

Math Application Skills
- Use English and metric measures

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures

Assessment and Analysis

1. Determine type of contamination on thermometer.
2. Consider nursing and medical diagnoses of individual whose temperature was taken.

Planning

3. Obtain equipment.
4. Apply gloves.

Implementation

5. Use tissue to wipe from stem to bulb end of thermometer to remove any obvious soil.
6. Apply soap to tissue and wipe from stem to bulb end of thermometer using **friction**.

7. Repeat cleaning three times, using separate areas of tissue or separate tissue.

8. Rinse thermometer under cold running water.

9. Dry thermometer with tissue, wiping from stem toward bulb.

   NOTE: If water remains on the thermometer and the thermometer is stored in an antiseptic solution, the solution will be diluted.

10. Check reading and shake down, if necessary, below 97° F or 36° C.

11. Store in antiseptic or disinfectant solution for prescribed time or until needed, or place in appropriate storage container.

12. Remove gloves without contaminating self.

13. Wash hands.

Evaluation

14. Evaluate according to following criteria:

    a. No obvious soil is present.

    b. No cracks or breaks are present in thermometers.

Documentation

None necessary.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 10

- For suggestions on teaching Basic Skills, refer to Instructional Supplement for Activity Sheet 1 and Job Sheet 1.

PRACTICAL TEST 1

VITAL SIGNS

XI

JOB SHEET 1

Obtain temperatures with mercury thermometers.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for medical or nursing diagnoses that would alter selection of appropriate site.	_____	_____
2. Determined patient's ability to cooperate in procedure.	_____	_____
3. Determined whether the patient had anything to eat, drink, or smoke in the last 15-30 minutes.	_____	_____
4. Observed the skin for a flushed or pale appearance.	_____	_____
5. Felt the skin to determine whether it was warmer or cooler than expected and whether moisture was present.	_____	_____
6. Observed for shivering.	_____	_____
7. Washed hands.	_____	_____
8. Obtained appropriate thermometer.	_____	_____

	YES	NO
9. Obtained all necessary equipment.	____	____
10. Explained procedure to patient.	____	____
11. Provided privacy for patient.	____	____
12. If thermometer had been stored in antiseptic solution, rinsed with cold running water.	____	____
13. Dried with tissue.	____	____
14. Checked to see that reading was below 95° F. or 36° C.	____	____
15. Inserted thermometer into disposable sheath.	____	____
16. For oral route:		
a. Placed the bulb of the thermometer under the tongue and instructed patient to close lips tightly around thermometer.	____	____
b. Left in place for 3 minutes, making sure thermometer remained in place.	____	____
17. For rectal route:		
a. Placed thermometer on paper towel and applied generous amount of lubricant **or** Placed thermometer in individual packet of lubricant.	____	____
b. Applied gloves.	____	____
c. Positioned adult patient on side and infant on abdomen with head turned to side.	____	____

	YES	NO
d. Raised linen over buttocks so anus could be seen.	_____	_____
e. Inserted thermometer about 1½ inches for adult, 1 inch for child or ½ inch for infant.	_____	_____
f. Held thermometer in place for 3-5 minutes.	_____	_____
18. Fox axillary temperature:		
a. Positioned patient in supine position with skin of axilla exposed.	_____	_____
b. Patted skin dry if any moisture was present.	_____	_____
c. Placed bulb of thermometer in center of axilla.	_____	_____
d. Placed arm close to body with forearm across chest.	_____	_____
e. Left in place for 10 minutes.	_____	_____
19. Removed thermometer.	_____	_____
20. Wiped from stem to bulb end once with tissue, removing sheath.	_____	_____
21. Held at eye level to read thermometer.	_____	_____
22. Placed thermometer safely on tissue while assisting patient to comfortable position.	_____	_____
23. For rectal temperature:		
a. Cleaned any lubricant from anus.	_____	_____

			YES	NO
	b.	Assisted patient to a comfortable position and rearranged covers.	____	____
	c.	Removed gloves without contaminating self.	____	____
24.	For axillary temperature:			
	a.	Assisted patient back into gown, if it was partially removed.	____	____
	b.	Rearranged covers as necessary.	____	____
25.	Cleaned thermometer using soap, water, and friction.		____	____
26.	Shook thermometer down and replaced in designated area.		____	____
27.	Washed hands.		____	____
28.	Evaluated according to established criteria.		____	____
29.	Documented appropriately.		____	____

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Chose appropriate route	4	3	2	1
Performed steps of procedure correctly	4	3	2	1
Obtained accurate reading	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 2

VITAL SIGNS

JOB SHEET 2

Obtain temperatures with electronic thermometer.

STUDENT'S NAME ____________________ DATE __________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for medical or nursing diagnoses that would alter selection of appropriate site.	_____	_____
2. Determined patient's ability to cooperate in procedure.	_____	_____
3. Determined whether the patient had anything to eat, drink, or smoke in the last 15-30 minutes.	_____	_____
4. Observed the skin for a flushed or pale appearance.	_____	_____
5. Felt the skin to determine whether it was warmer or cooler than expected and whether moisture was present.	_____	_____
6. Observed for shivering.	_____	_____
7. Washed hands.	_____	_____
8. Obtained electronic thermometer and appropriate probe.	_____	_____

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		YES	NO
9.	Obtained all necessary equipment.		
10.	Explained procedure to patient.		
11.	Provided privacy for patient.		
12.	Removed temperature probe from storage compartment.		
13.	Placed disposable sheath over probe, making sure it was securely in place.		
14.	For oral route:		
a.	Placed the covered probe under the tongue and instructed patient to close lips tightly around thermometer.		
b.	Left in place until unit signaled that the temperature had been obtained, making sure thermometer remained in place.		
15.	For rectal route:		
a.	Placed probe on paper towel and applied generous amount of lubricant **or** Placed probe in individual packet of lubricant.		
b.	Applied gloves.		
c.	Positioned adult patient on side and infant on abdomen with head turned to side.		
d.	Raised linen over buttocks so anus could be seen.		

		YES	NO
	e. Inserted probe about 1½ inches for adult, 1 inch for child or ½ inch for infant.	_____	_____
	f. Held thermometer in place until unit signaled that the temperature had been obtained.	_____	_____
16.	Fox axillary temperature:		
	a. Positioned patient in supine position with skin of axilla exposed.	_____	_____
	b. Patted skin dry if any moisture was present.	_____	_____
	c. Placed the probe in center of axilla.	_____	_____
	d. Placed arm close to body with forearm across chest.	_____	_____
	e. Left in place until unit signaled that temperature had been obtained.	_____	_____
17.	Removed probe.	_____	_____
18.	Noted digital reading promptly.	_____	_____
19.	Ejected disposable sheath from probe directly into trash container or into paper towel for carrying to trash.	_____	_____
20.	Replaced probe into storage compartment.	_____	_____
21.	For rectal temperature:		
	a. Cleaned any lubricant from anus.	_____	_____

		YES	NO
	b. Assisted patient to a comfortable position and rearranged covers.	_____	_____
	c. Removed gloves without contaminating self.	_____	_____
22.	For axillary temperature:		
	a. Assisted patient back into gown, if it was partially removed.	_____	_____
	b. Rearranged covers as necessary.	_____	_____
23.	Returned unit to storage area.	_____	_____
24.	Washed hands.	_____	_____
25.	Evaluated according to established criteria.	_____	_____
26.	Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ____

____

____

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PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Chose appropriate route	4	3	2	1
Performed steps of procedure correctly	4	3	2	1
Obtained accurate reading	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1516

JOB SHEET 3

Obtain temperature with a tympanic thermometer.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for medical or nursing diagnoses that would alter selection of appropriate site.	____	____
2. Determined patient's ability to cooperate in procedure.	____	____
3. Observed the ears for any drainage.	____	____
4. Observed the skin for a flushed or pale appearance.	____	____
5. Felt the skin to determine whether it was warmer or cooler than expected and whether moisture was present.	____	____
6. Observed for shivering.	____	____
7. Washed hands.	____	____
8. Obtained thermometer.	____	____

	YES	NO
9. Explained procedure to patient.	____	____
10. Provided privacy for patient.	____	____
11. Removed temperature probe from storage.	____	____
12. Placed probe cover on probe.	____	____
13. Gently restrained head with one hand held alongside head.	____	____
14. Inserted probe into ear canal just enough to seal opening.	____	____
15. Pressed button or switch to activate unit or followed manufacturer's directions for specific unit used.	____	____
16. When unit signaled temperature had been obtained, removed probe from ear.	____	____
17. Read temperature on display panel.	____	____
18. Ejected probe cover from unit into trash receptacle or onto paper towel for transport to trash.	____	____
19. Replaced probe in storage position.	____	____
20. Stored unit in appropriate area, making sure it was stored correctly for recharging.	____	____
21. Evaluated according to established criteria.	____	____
22. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Performed steps of procedure correctly	4	3	2	1
Obtained accurate reading	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 4

VITAL SIGNS

XI

JOB SHEET 4

Assess radial pulse.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted medical and nursing diagnosis that would influence pulse.	_____	_____
2. Noted accessibility of radial artery.	_____	_____
3. Noted skin color and warmth and color of nailbeds.	_____	_____
4. Checked previous pulse rates.	_____	_____
5. Determined patient's activity prior to assessment of pulse.	_____	_____
6. Washed hands.	_____	_____
7. Explained procedure to patient.	_____	_____
8. Placed patient's wrist in relaxed, well-supported position with wrist extended and palm down.	_____	_____

	YES	NO
9. Placed tips of first three fingers over radial artery located along thumb side of patient's wrist.	____	____
10. Pressed lightly until pulse could be felt.	____	____
11. When pulse was felt, checked watch and counted for a full minute.	____	____
12. Assessed regularity or irregularity of pulse.	____	____
13. Assessed volume or strength of pulse.	____	____
14. Assisted patient in resuming comfortable position of arm, if necessary.	____	____
15. Washed hands.	____	____
16. Evaluated according to established criteria.	____	____
17. Documented appropriately.	____	____

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Placed appropriate fingers over site of radial artery	4	3	2	1
Followed steps of procedure	4	3	2	1
Obtained accurate reading	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date) (Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 5

VITAL SIGNS

XI

JOB SHEET 5

Assess apical pulse.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for medical and nursing diagnosis that would alter apical pulse.	____	____
2. Checked for medications that would alter apical pulse.	____	____
3. Washed hands.	____	____
4. Obtained equipment.	____	____
5. Explained procedure to patient.	____	____
6. Provided privacy.	____	____
7. Cleaned earpieces and diaphragm of stethoscope with alcohol swabs.	____	____
8. Had patient assume supine or sitting position.	____	____
9. Removed linens or clothing to expose left side of chest.	____	____

	YES	NO
10. Warmed the stethoscope diaphragm by holding it against the palm of the hand for a few seconds.		
11. Placed the stethoscope on the chest to the left of the sternum and below the nipple.		
12. Listened for the "lub-dub" sound of the apical pulse.		
13. Counted the apical pulse rate for one minute.		
14. Assessed regularity or irregularity of apical pulse.		
15. Assessed volume of apical pulse.		
16. Replaced clothing and bedding and assist patient to comfortable position.		
17. Washed hands.		
18. Evaluated according to established criteria.		
19. Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Placed stethoscope correctly	4	3	2	1
Followed steps of procedure correctly	4	3	2	1
Obtained accurate reading	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 6

VITAL SIGNS

XI

JOB SHEET 6

Assess apical/radial pulse.

STUDENT'S NAME ________________ DATE __________

EVALUATOR'S NAME ________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for medical or nursing diagnosis that would alter apical or radial pulses.	____	____
2. Checked for medications that would alter pulse rates.	____	____
3. Washed hands.	____	____
4. Obtained equipment.	____	____
5. Enlisted help of second nurse.	____	____
6. Explained procedure to patient.	____	____
7. Provided privacy.	____	____
8. Cleaned earpieces and diaphragm of stethoscope with alcohol swabs.	____	____

	YES	NO
9. Placed patient in supine position with wrist extended and palm down in relaxed position.	____	____
10. Removed linens or clothing to expose left side of chest.	____	____
11. First nurse warmed the stethoscope diaphragm by holding it against the palm of the hand for a few seconds.	____	____
12. Placed the stethoscope on the chest to the left of the sternum and below the nipple to auscultate apical pulse.	____	____
13. Second nurse palpated radial artery for pulse.	____	____
14. On signal, using the same watch, both nurses counted pulses for one minute.	____	____
15. Replaced clothing and bedding and assisted patient to comfortable position.	____	____
16. Washed hands.	____	____
17. Evaluated according to established criteria.	____	____
18. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Placed fingers and stethoscope correctly	4	3	2	1
Obtained accurate pulse assessment	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 7

VITAL SIGNS

XI

JOB SHEET 7

Assess peripheral pulses with and without doppler unit.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted medical and nursing diagnosis that would influence pulse.	_____	_____
2. Noted skin color and warmth and color of nailbeds on extremity to be assessed.	_____	_____
3. Noted the presence of any edema on the extremity to be assessed.	_____	_____
4. Washed hands.	_____	_____
5. Obtained equipment.	_____	_____
6. Explained procedure to patient.	_____	_____
7. Placed extremity to be assessed in relaxed position with pulse site exposed.	_____	_____

	YES	NO
8. To palpate peripheral pulse:		
a. Placed tips of first three fingers over artery at site to be assessed.	___	___
b. Pressed lightly until pulse could be felt.	___	___
9. To assess pulse with doppler ultrasound unit:		
a. Placed gel either on skin or on probe tip.	___	___
b. Turned on unit.	___	___
c. Placed probe against pulse site at a 45° angle, using light pressure and rolling movements to detect pulse.	___	___
10. When pulse was felt or heard, checked watch and counted for a full minute.	___	___
11. Assessed regularity or irregularity of pulse.	___	___
12. Assessed volume or strength of pulse.	___	___
13. Wiped off gel, if doppler unit was used.	___	___
14. Assisted patient in resuming comfortable position, if necessary.	___	___
15. Washed hands.	___	___
16. Evaluated according to established criteria.	___	___
17. Documented appropriately.	___	___

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Chose appropriate site as indicated by condition	4	3	2	1
Used equipment correctly	4	3	2	1
Obtained accurate pulse assessment	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 8 — VITAL SIGNS — XI

JOB SHEET 8

Assess respirations.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Checked for medical or nursing diagnoses that would alter respirations.	_____	_____
2. Assessed skin color.	_____	_____
3. Listened for noises associated with respiration.	_____	_____
4. Observed movements of chest and abdomen.	_____	_____
5. Looked for symmetry of chest.	_____	_____
6. Observed effect of position on respirations.	_____	_____
7. Washed hands.		
8. Explained procedure to patient.	_____	_____
9. Provided privacy.	_____	_____

	YES	NO
10. Assisted patient to assume supine or sitting position.		
11. Placed patient's forearm across chest and held wrist as for taking pulse.		
12. Counted respirations for one full minute.		
13. Observed rhythm of respirations.		
14. Observed depth of respirations.		
15. Assisted patient to assume comfortable position.		
16. Washed hands.		
17. Evaluated according to established criteria.		
18. Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Rate obtained within two respirations of instructor	4	3	2	1
Observed patient correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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PRACTICAL TEST 9

VITAL SIGNS

XI

JOB SHEET 9

Obtain blood pressure reading.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted any medical or nursing diagnoses that would alter technique or readings.	_____	_____
2. Assessed possible sites for obtaining blood pressure.	_____	_____
3. Assessed patient's ability to cooperate in procedure.	_____	_____
4. Checked patient's recent activities for factors that could alter reading.	_____	_____
5. Noted any complaints that might indicate change in blood pressure reading such as weakness, dizziness, headache, or blurred vision.	_____	_____
6. Washed hands.	_____	_____
7. Obtained equipment.	_____	_____

	YES	NO
8. Cleaned earpieces and diaphragm of stethoscope.		
9. Determined appropriate cuff size.		
10. Explained procedure to patient.		
11. Provided privacy.		
12. Removed any clothing that would interfere with obtaining reading.		
13. Placed arm with palm up and forearm well-supported at heart level.		
14. Placed deflated cuff securely around arm with lower edge 1 inch above antecubital area.		
15. Positioned gauge of aneroid cuff where it could be easily seen or mercury gauge at nurse's eye level.		
16. Closed thumb screw on cuff.		
17. Palpated brachial artery.		
18. Obtained maximum inflation level by inflating cuff to point where brachial pulse disappeared and then inflated 30 mm Hg higher.		
19. Immediately positioned diaphragm of of stethoscope over brachial artery and held in place with one hand.		
20. With other hand, opened thumb screw and slowly deflated cuff at rate of 2-3 mm Hg per second while listening.		
21. Noted point where Korotkoff sounds were first heard for systolic reading.		

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	YES	NO
22. Continued listening and allowing cuff to deflate until sounds were no longer heard. Noted this point as the diastolic reading.	____	____
23. Opened thumb screw completely and allowed cuff to deflate.	____	____
24. Removed cuff and stored in appropriate place.	____	____
25. Assisted patient to comfortable position and replaced clothing and covers as needed.	____	____
26. Evaluated according to established criteria.	____	____
27. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCE EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Chose correct site	4	3	2	1
Chose correct cuff size	4	3	2	1
Placed cuff correctly	4	3	2	1
Placed stethoscope correctly	4	3	2	1
Obtained reading within 5 mm Hg of instructor	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 10

VITAL SIGNS

XI

JOB SHEET 10

Clean mercury thermometer.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined type of contamination on thermometer.	_____	_____
2. Considered nursing and medical diagnoses of individual whose temperature was taken.	_____	_____
3. Obtained equipment.	_____	_____
4. Applied gloves.	_____	_____
5. Used tissue to wipe from stem to bulb end of thermometer to remove any obvious soil.	_____	_____
6. Applied soap to tissue and wiped from stem to bulb end of thermometer using friction.	_____	_____
7. Repeated cleaning three times, using separate areas of tissue or separate tissue.	_____	_____

	YES	NO
8. Rinsed thermometer under cold running water.		
9. Dried thermometer with tissue, wiping from stem toward bulb.		
10. Checked reading and shook down, if necessary, below 97° F or 36° C.		
11. Stored in antiseptic or disinfectant solution for prescribed time or until needed, or placed in appropriate storage container.		
12. Removed gloves without contaminating self.		
13. Washed hands.		
14. Evaluated according to established criteria.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used soap and friction in cleaning	4	3	2	1
Cleaned using correct procedure	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

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WRITTEN TEST

VITAL SIGNS

XI

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with vital signs to their definitions.
Write the correct letter in the blank.

Part 1

______1. The process of breathing out

______2. Rapid pulse rate

______3. Not having an elevated body temperature

______4. Feeling with the hands

______5. An increase in body temperature

______6. Cessation of breathing

______7. The difference between pulses taken simultaneously at the apical and radial sites

______8. An instrument using ultrasound waves to detect pulse

______9. The pressure of blood against the walls of the arteries

______10. The pulse heard over the apex of the heart

a. Afebrile
b. Apical pulse
c. Apnea
d. Arrhythmia
e. Blood pressure
f. Diastolic pressure
g. Doppler unit
h. Dyspnea
i. Expiration
j. Hyperthermia
k. Hypoventilation
l. Palpation
m. Pulse deficit
n. Pyrexia
o. Tachycardia

Part II

_____1. A fluid wave set up by the beating of the heart that can be felt at various sites over the body and heard over the heart

_____2. High blood pressure

_____3. Without rhythm or regularity

_____4. The process of breathing out

_____5. Sounds heard through the stethoscope when taking blood pressure

_____6. Slow pulse rate

_____7. Elevated body temperature

_____8. Cyclic respiratory pattern with an increase in rate and depth followed by a decrease and a period of apnea

_____9. The higher number of a blood pressure reading, occurring when the left ventricle of the heart is contracting

_____10. A decrease in body temperature

a. Afebrile

b. Arrhythmia

c. Bradycardia

d. Bradypnea

e. Cheyne-Stokes respirations

f. Diastolic pressure

g. Exhalation

h. Hypertension

i. Hyperthermia

j. Hypothermia

k. Korotkoff sounds

l. Pulse

m. Pulse pressure

n. Pyrexia

o. Systolic pressure

Part III

______1. The portion of the brain that controls body temperature

______2. A blood-pressure measuring device that does not contain liquid

______3. An instrument for auscultating body sounds

______4. Away from the center

______5. Difficulty in breathing

______6. The process of breathing in

______7. A respiratory pattern with decreased rate and depth of breathing

______8. The process of breathing in and out

______9. Having an elevated temperature

______10. In blood pressure determination, the presence, then absence of Korotkoff sounds and then their recurrence at a lower level

a. Aneroid sphygmomanometer

b. Auscultatory gap

c. Doppler unit

d. Dyspnea

e. Exhalation

f. Febrile

g. Hypertension

h. Hypoventilation

i. Hypothalamus

j. Inhalation

k. Peripheral

l. Respiration

m. Sphygmomanometer

n. Stethoscope

o. Tachycardia

Part IV

______1. Slow respiratory rate

______2. In determination of pulse, the spacing of beats

______3. The process of breathing in

______4. Listening for sounds within the body with a stethoscope

______5. The difference between the systolic and diastolic blood pressure

______6. Rapid respiratory rate

______7. A respiratory pattern with increased rate and depth of breathing

______8. Low blood pressure

______9. The lower number of a blood pressure reading, occurring when the left ventricle of the heart is at rest

_____10. An instrument for measuring blood pressure

a. Apnea
b. Auscultation
c. Bradycardia
d. Bradypnea
e. Diastolic pressure
f. Hypertension
g. Hyperventilation
h. Hypotension
i. Hypoventilation
j. Inspiration
k. Pulse pressure
l. Rhythm
m. Sphygmomanometer
n. Systolic pressure
o. Tachypnea

OBJECTIVE 2

Choose the word or phrase to complete statements about body temperature. Write the correct letter in the blank.

______1. Body temperature is controlled by the ___.

a. cerebrum
b. hypothalamus
c. ventricle
d. apex

______2. Heat is produced in the body with ___.

a. breathing and perspiration
b. urination and perspiration
c. metabolism of food and exercise
d. perspiration and exercise

OBJECTIVE 3

Select factors that may influence the body's temperature. Write the correct letter in the blank.

______1. The lowest body temperature within a 24-hour period could be expected ___.

a. early morning
b. at noon
c. late afternoon
d. late night

______2. Hormones secreted by which gland can influence temperature?

a. Pituitary
b. Thymus
c. Adrenal
d. Parathyroid

______3. Which of the following patients would be most likely to have an elevated body temperature?

a. A man with a heart problem
b. An infant who has had surgery
c. A child with an upper respiratory infection
d. A woman who has just delivered a baby

OBJECTIVE 4

Compare the Celsius and Fahrenheit temperature scales. Write the correct information in the blanks.

	C°	F°
1. Normal temperature	_____	_____
2. Average range	±_____	±_____

OBJECTIVE 5

Distinguish among characteristics of temperature sites. Write an "O" in the blank if the statement refers to the oral route, an "R" if rectal, an "A" if axillary, or a "T" if tympanic.

______1. Takes the longest amount of time to measure.

______2. The most accessible site with a mercury thermometer.

______3. Has a normal Fahrenheit reading of 99.6.

______4. Cannot be used after oral surgery.

______5. Can be measured only with an electronic thermometer.

______6. Should not be used when the patient has diarrhea.

______7. Takes the least amount of time to measure.

______8. Cannot be used with infants.

______9. Registers the lowest reading.

_____10. Should not be used for the unconscious patient.

OBJECTIVE 6

List three pulse assessments.

____

____

____

OBJECTIVE 7

Select factors that influence pulse rate, rhythm, and volume.
Write the correct letter in the blank.

______1. The age group with the fastest normal pulse rate is ___.

- a. the newborn
- b. early childhood
- c. adolescence
- d. adulthood

______2. Pulse rate increases with ___.

- a. age
- b. body temperature
- c. increase in blood volume
- d. digitalis preparations

______3. The nurse would most likely find an increased pulse rate in the patient who has ___.

- a. a high red blood cell count
- b. had a pain medication
- c. been up walking
- d. been sleeping

______4. The nurse could expect an adult's pulse rate to fall between ___.

- a. 40-80 per minute
- b. 60-100 per minute
- c. 80-120 per minute
- d. 100-160 per minute

______5. When a patient has a difference in the interval of space between beats it is called a/an ___.

- a. bradycardia
- b. bounding pulse
- c. elastic pulse
- d. arrhythmia

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______6. When assessing pulses, the nurse could expect ___.

a. stronger pulses on the left side of the body
b. stronger pulses in the elderly
c. equal pulses bilaterally
d. no particular pattern in strength

______7. A stronger pulse volume could be expected with ___.

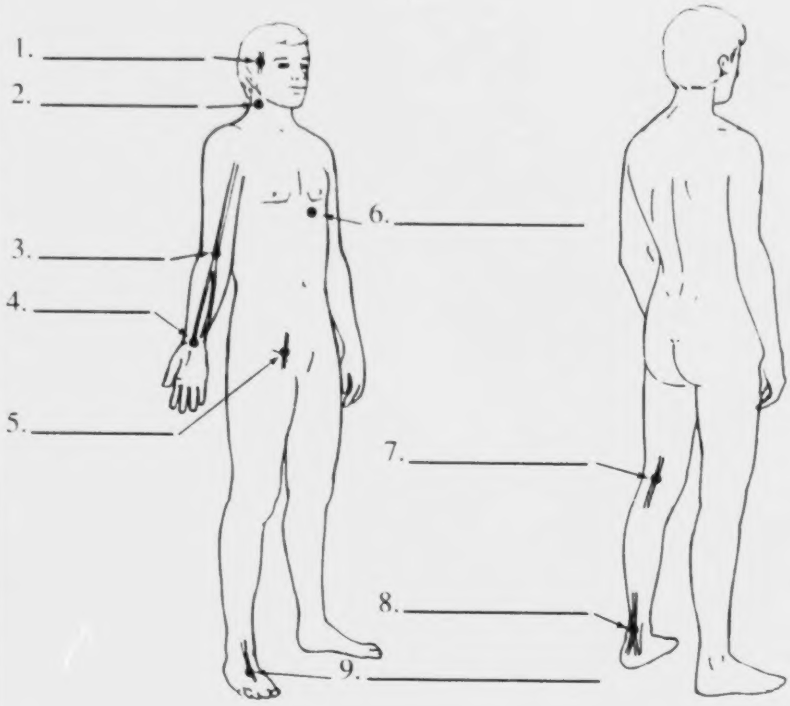
a. age
b. increased body temperature
c. increase in blood volume
d. use of sedatives

______8. A pulse which is easily obliterated can be described as ___.

a. bounding
b. thready
c. normal
d. rhythmic

OBJECTIVE 8

Label pulse sites. Write the correct site names in the blanks.



OBJECTIVE 9

Select factors to consider when assessing respiration. Write the correct letter in the blank.

_______1. We expect respiratory rhythm to ___.

a. vary more than pulse rhythm
b. increase with age
c. be more regular in illness
d. have little effect on health

_______2. The nurse observing respirations notices that the patient sighs. This could be interpreted as a/an ___.

a. indicator of respiratory difficulty
b. abnormal respiratory noise
c. symptom of respiratory obstruction
d. normal phenomenon

_______3. One respiration is ___.

a. one inspiration
b. one expiration
c. one inspiration and one expiration
d. one expiration and one inspiration

_______4. It is important to watch respirations as well as feel respiratory movement in order to detect ___.

a. respiratory obstructions
b. changes in rate
c. abnormal respiratory movements
d. oxygen deficiency

_______5. The size of the chest cavity influences the respiratory ___.

a. rate
b. rhythm
c. depth
d. quality

______6. The assessment finding that might indicate that a patient is experiencing respiratory difficulty is ___.

a. the patient's respiratory rate increases after walking
b. an infant has a respiratory rate of 40
c. the rise and fall of the chest can be seen with breathing
d. a 77-year-old man is becoming increasingly disoriented

OBJECTIVE 10

Choose the word or phrase to complete statements about how respiratory assessment factors may be influenced. Write the correct letter in the blank.

______1. The nurse who has just assessed a respiratory rate of 34 in an adult male would be correct in describing it as ___.

a. normal
b. apnea
c. symmetrical
d. tachypnea

______2. We would expect the patient with the fastest respiratory rate to be ___.

a. An 80 year old male
b. A 36 year old female
c. A 10 year old female
d. A five day old male

______3. A man receives a narcotic pain medication. The nurse can expect that his respirations will ___.

a. Increase in depth
b. Become noisy
c. Decrease in rate
d. Not be affected

______4. When there is an elevated body temperature, the nurse can expect to see ___.

a. Increased respiratory rate
b. Decreased respiratory rate
c. Increased depth
d. Decreased depth

______5. Narcotics and barbiturates ___.

a. increase rate and depth of respiration
b. decrease rate and depth of respiration
c. increase rate, decrease depth of respiration
d. decrease rate, increase depth of respiration

______6. Deeper respirations could be expected with the patient ___.

a. In an upright position
b. Lying down
c. In Trendelenburg position
d. In Sim's position

OBJECTIVE 11

Choose the word or phrase to complete statements about assessing blood pressure. Write the correct letter in the blank.

______1. An adult patient has a blood pressure of 116/74. It would be correct to say that the patient has ___.

a. hypotension
b. hypertension
c. an abnormal pulse pressure
d. a normal blood pressure

______2. In relation to an adult's blood pressure, we expect a child's blood pressure to be ___.

a. lower
b. higher
c. about the same
d. easier to obtain

______3. Considering the adult blood pressure reading, 144/86, we can say that the number 86 is ___.

a. abnormally high
b. the reading with the left ventricle relaxed
c. the systolic reading
d. a measure of the body's nutritional status

______4. Regular exercise over a long period of time can ___.

a. cause an increase in systolic pressure
b. result in a narrowed pulse pressure
c. lower blood pressure
d. increase Korotkoff sounds

______5. An increase in blood pressure could be caused by ___.

a. a decreased cardiac output
b. a decrease in circulating blood volume
c. increased peripheral vascular resistance
d. increased size of the blood pressure cuff

______6. The item on a patient's breakfast tray most likely to influence blood pressure is ___.

a. coffee
b. orange juice
c. cereal
d. toast

OBJECTIVE 12

Choose the word or phrase to complete statements about measuring blood pressure. Write the correct letter in the blank.

______1. In order to obtain correct readings, the bladder of the blood pressure cuff should cover ___.

a. 1/3 of the upper arm
b. 2/3 of the upper arm
c. 50% of the upper arm
d. 100% of the upper arm

______2. If an adult blood pressure cuff were used to take a child's blood pressure ___.

a. it would be a painful experience for the child
b. the cuff should be folded in half
c. the reading obtained would be too low
d. it would be impossible to get any kind of reading

OBJECTIVE 13 **Name the artery normally used for assessing blood pressure.**

The artery normally used for assessing blood pressure is the

______________________________.

OBJECTIVE 14 **Match sites for placing the blood pressure cuff with the artery where the blood pressure is assessed.** Write the correct letter in the blank.

______1. Lower leg

______2. Upper arm

______3. Upper leg

a. Brachial

b. Carotid

c. Femoral

d. Popliteal

e. Radial

f. Tibial

NOTICE The assignment sheet and job sheets listed below are not part of the Written Test. If they have not been completed, check with your instructor.

OBJECTIVE 15 **Document vital signs.** SCORE ______

OBJECTIVE 16 **Demonstrate the ability to:**

a. Obtain temperatures with mercury thermometers. RATING ______

b. Obtain temperatures with an electronic thermometer. RATING ______

c. Obtain temperature with a tympanic thermometer. RATING ______

d. Assess radial pulse. RATING ______

e. **Assess apical pulse.** RATING ______

f. **Assess apical/radial pulse.** RATING ______

g. **Assess peripheral pulses with and without doppler unit.** RATING ______

h. **Assess respirations.** RATING ______

i. **Obtain blood pressure reading.** RATING ______

j. **Clean mercury thermometer.** RATING ______

OBJECTIVE 1

PART I

1. i
2. o
3. a
4. l
5. j
6. c
7. m
8. g
9. e
10. b

PART II

1. l
2. h
3. b
4. g
5. k
6. c
7. n
8. e
9. o
10. j

PART III

1. i
2. a
3. n
4. k
5. d
6. j
7. h
8. l
9. f
10. b

PART IV

1. d
2. l
3. j
4. b
5. k
6. o
7. g
8. h
9. e
10. m

OBJECTIVE 2

1. b
2. c

OBJECTIVE 3

1. a
2. c
3. c

OBJECTIVE 4

	C	F
1.	37°	98.6°
2.	±.5°	±1°

OBJECTIVE 5

1. A
2. O
3. R
4. O
5. T
6. R
7. T
8. O
9. A
10. O

OBJECTIVE 6

- Rate
- Rhythm
- Volume

OBJECTIVE 7

1. a
2. b
3. c
4. b
5. d
6. c
7. c
8. b

OBJECTIVE 8

1. Temporal
2. Carotid
3. Apical
4. Brachial
5. Femoral
6. Radial
7. Popliteal
8. Dorsalis pedis (pedal)
9. Posterior tibial (Tibial)

OBJECTIVE 9

1. a
2. d
3. c
4. c
5. a
6. d

OBJECTIVE 10

1. d
2. d
3. c
4. a
5. b
6. a

OBJECTIVE 11

1. d
2. a
3. b
4. c
5. c
6. a

OBJECTIVE 12

1. b
2. c

OBJECTIVE 13

1. brachial artery

OBJECTIVE 14

1. f
2. a
3. d

OBJECTIVE SHEET

ASSESS THE PATIENT

XII

INTRODUCTION

Assessment is the important first step of the nursing process. It is the process of gathering data. The data that comes from physical assessment is extremely important. The nurse must be skilled in performing physical assessment and in assisting others.

UNIT OBJECTIVE

After completing this unit the student should be able to perform a limited head-to-toe physical assessment and other specific assessments to add to the data base. The student should also be able to assist another examiner in a complete physical examination. The student will show these competencies by completing job sheets and a written test with a minimum of 85% accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with assessment to their definitions.
2. List reasons for performing assessments and examinations.
3. Distinguish between objective and subjective symptoms.
4. Distinguish among the four basic assessment techniques used in physical assessment.
5. Identify equipment used in physical assessment.
6. Identify positions used in physical assessment.
7. Match assessment positions to the exams for which they are used.
8. Choose the correct word or phrase to complete statements about responsibilities of the nurse when assisting with a physical examination.
9. Choose the correct word or phrase to complete statements about types of physical assessments.
10. Choose the correct word or phrase to complete statements about guidelines for assessing the skin.

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11. Choose the correct word or phrase to complete statements about guidelines for physical assessments.

12. Demonstrate the ability to:

    a. Weigh a patient. (Job Sheet 1)

    b. Measure a patient's height/length. (Job Sheet 2)

    c. Evaluate vision. (Job Sheet 3)

    d. Evaluate hearing. (Job Sheet 4)

    e. Perform blood glucose monitoring. (Job Sheet 5)

    f. Assist with a physical examination. (Job Sheet 6)

    g. Perform an initial physical assessment. (Job Sheet 7)

PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
  - Assist students to conduct a chapter service project on assessment.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
  - Plan community or school health project that involves disseminating pamphlets about the importance of physical examinations.

DELIVERY

Objective 1

- Discuss terms and definitions dealing with assessment.

Objective 2

- Discuss various reasons for assessment procedures.

Objective 3

- Discuss objective and subjective symptoms.

- Have students complete Activity Sheet 1 dealing with objective and subjective symptoms.

Objective 4

- Discuss basic techniques used in physical assessment.

- Have students list ways they have already used the various techniques in other units and procedures.

Objective 5

- Discuss equipment used in physical assessment.

- Show students any pieces of equipment available.

Objective 6

- Discuss positions used in physical assessment.

Objectives 7 and 8

- Discuss responsibilities in assisting with a physical examination.

- Show video *Assisting with a Physical Assessment.*

Objective 9

- Discuss types of physical assessments.

- Have students think of situations when various types of assessments would be used.

- Have students practice neuro checks and neurovascular checks on one another.

Objectives 10 and 11

- Discuss guidelines for physical assessment.

- Have students practice various assessment skills such as assessing skin and listening to breath sounds of one another.

APPLICATION

Objective 12

- Discuss weighing a patient.
- Discuss different measures of weight.
- Have students practice weighing on whatever types of scales are available and complete Job Sheet 1.
- Discuss measuring height/length.
- Discuss various measures of height/length.
- Have students complete Activity Sheet 2 dealing with converting measurements.
- Have students measure height and length and complete Job Sheet 2.
- Discuss measurement of vision.
- Coat sunglasses with multiple layers of clear nail polish to create the effect of visual impairment. Have students try to get around with this "visual impairment".
- Have students complete vision assessment and complete Job Sheet 3.
- Discuss measurement of hearing.
- Have students complete hearing assessment and complete Job Sheet 4.
- Discuss blood glucose monitoring.
- Demonstrate types of monitoring device available.
- Have students perform blood glucose monitoring and complete Job Sheet 5.
- Discuss assisting with a physical examination.
- Have students practice changing heads on ophthalmoscope/ otoscope.
- Have students practice draping in dorsal recumbent position.

- Have students complete Job Sheet 6.
- Discuss a head-to-toe physical assessment.
- Have students complete an assessment on one another and complete Job Sheet 7.
- Prepare a laboratory mannequin with various material such as IV tubing, dressing, wound drain, N/G tube, Foley catheter, restraint, anti-embolism stockings and any other items available. Have students assess this patient.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual students as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.
- Complete appropriate section of competency profiles.

- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Assisting with a Complete Physical Assessment*, available from Medcom Inc., Box 3225, Garden Grove, CA 92642.
- *Physical Assessment: Foundation of Data Collection*, available from Medcom Inc., Box 3225, Garden Grove, CA 92642.

UNIT REFERENCES

- *Assessment.* Intermed Communications, Inc., Springhouse, Pennsylvania, 1982.
- *Assessing Vital Functions Accurately.* Intermed Communications, Inc., Horsham, Pennsylvania, 1980.
- *Assessing Your Patients.* Intermed Communications, Inc., Horsham, Pennsylvania, 1980.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures* (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- *The Lippincott Manual of Nursing Practice* (5th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1991.
- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques.* The C.V. Mosby Company, St. Louis, Missouri, 1986.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice.* The C.V. Mosby Company, St. Louis, Missouri, 1987.
- *Practical Nursing-Volume 1.* Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.

- *Procedures*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1983.
- Tomky, Donna. "Diabetes Now: A Three-pronged Approach to Monitoring", *RN*. March 1989, p. 24-29.
- Will, Connie A. and Judith B. Eighmy. *Being a Long-Term Care Nursing Assistant* (3rd ed). Prentice Hall, Englewood Cliffs, New Jersey, 1991.

GIVING A VAGINAL DOUCHE

INTRODUCTION

A vaginal douche or irrigation is occasionally administered in the clinical setting. It is warm fluid intended to aid in healing or relieve irritation.

EQUIPMENT AND SUPPLIES

- Douche bag with nozzle
- Bath thermometer
- 1000-2000 ml of prescribed solution at 100-105 degrees F.

NOTE: Solutions may include normal saline, tap water, povodine/iodine, sodium bicarbonate solution or vinegar to 1000 ml of water. Other medicated solutions may be prescribed.

- Bath blanket
- Disposable underpad
- Bedpan
- IV pole
- Gloves

PROCEDURE

Assessment and Analysis

1. Note any medical or nursing diagnoses which would alter procedure.

2. Assess perineal area for any drainage, redness or breaks in skin.

3. Assess ability of patient to cooperate in procedure.

Planning

4. Wash hands.

5. Gather all equipment.

6. Explain procedure to patient.

7. Provide opportunity for patient to void.

8. Provide privacy.

Implementation

9. Place bath blanket over patient and fanfold top covers to foot of bed.

10. Place disposable underpad under patient.

11. Position patient on bedpan in dorsal recumbent position.

    NOTE: This position allows the solution to reach all areas of vagina. If the patient will be administering douches at home she may be advised to lie in the bathtub to create the same effect.

12. Drape patient with bath blanket.

13. Hang douche bag on IV pole at a height of 12 inches above patient's hips.

14. Apply gloves.

15. Release clamp and allow small amount of solution to run over perineal area to accustom patient to temperature.

16. Spread labia and insert nozzle into vagina a distance of 3-4 inches.

17. Allow solution to flow into the vagina rotating nozzle gently.

    NOTE: Fluid will flow back into bedpan immediately since there is no sphincter at the vagina.

18. When all solution has been used, remove nozzle from vagina.

19. Assist patient to Fowler's position on bedpan to allow for complete return of all solution.

20. Remove bedpan.

21. Assist patient to dry perineal area.

22. Observe contents of bedpan while emptying.

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23. Return all equipment to appropriate place.

NOTE: Douche bag can be reused by patient if additional irrigations will be necessary.

24. Remove gloves without contaminating self.

25. Wash hands.

Evaluation

26. Evaluate according to the following criteria:

    a. Procedure was completed without discomfort to patient.

    b. Solution returned without abnormal contents present.

Documentation

27. Record:

    a. Type and amount of solution used.

    b. Tolerance of patient for procedure.

    c. Any abnormalities of perineal area.

    d. Appearance of return flow of solution.

OBJECTIVE 1

Match terms associated with assessment to their definitions.

- **Admission assessment** — A complete assessment done on admission to a health-care institution
- **Adventitious breath sounds** — Abnormal breath sounds
- **Assessment** — Gathering information
- **Auscultation** — Gathering information by listening over areas of the body with a stethoscope
- **Bowel sounds** — Sounds associated with digestion assessed by auscultating the abdomen
- **Breath sounds** — Auscultation of air moving through the lungs
- **Capillary refill** — Return of blood to a body part after pressure to the area has been released
- **Disorientation** — Lack of awareness of person, place, or time
- **Dorsal recumbent position** — Lying on the back with the knees flexed and feet resting on the bed
- **Draping** — Covering with fabric or paper material to avoid exposure during examination
- **Erect position** — Standing upright
- **Focus assessment** — Gathering information pertaining to a specific problem
- **Genupectoral position** — Resting with the knees and chest on the bed
- **Homan's sign** — Pain in the calf when the examiner pushes the toes backward in dorsal flexion
- **Initial assessment** — Information gathered at the onset of a specific time period of patient care such as at the beginning of a shift

- **Inspection** — Gathering information by looking
- **Knee-chest position** — Resting with the knees and chest on the bed
- **Lithotomy position** — Lying on the back with the legs abducted and in stirrups
- **Neuro check** — Brief assessment of neurological function
- **Neurovascular check** — Brief assessment of neurological and circulatory function to a body part
- **Objective data** — Information obtained by observations of an examiner
- **Ophthalmoscope** — Instrument for viewing the interior of the eye
- **Orientation** — Awareness of person, place, and time
- **Otoscope** — Instrument for viewing the ear
- **Palpation** — Gathering information using the sense of touch
- **Papanicolaou smear (Pap Smear)** — Test to determine the presence of cervical cancer
- **Percussion** — Gathering information by tapping on a body part
- **Percussion hammer** — Instrument used for assessing reflex activity by tapping at several points on the body
- **Speculum** — Instrument for examination of body canals
- **Subjective data** — Information obtained by listening to an account of the patient's experience

OBJECTIVE 2

List reasons for performing assessments and examinations.

The nurse performs physical assessments and assists others with physical assessment to:

- Gather baseline data on a patient newly admitted to a health-care facility.
- Verify or discount information given by the patient or others during an interview.
- Monitor the progress of an illness or specific condition.
- Evaluate medical and nursing interventions.
- Encourage preventive health care, as in a routine or annual physical examination.

OBJECTIVE 3

Distinguish between objective and subjective symptoms.

During the process of assessment the nurse gains information about both objective and subjective symptoms.

Objective symptoms are those which the nurse can see, feel, hear, smell, or measure. A rash can be seen; cool, damp skin can be felt; heartbeats can be heard; foul odor can be smelled; blood pressure can be measured. Information obtained by physical assessment is objective data. Laboratory and X-ray data are also objective.

Subjective symptoms are those which the patient experiences. Subjective symptoms would include pain, dizziness, or nausea. The nurse must listen to the patient and ask questions to determine the presence of subjective symptoms.

Some subjective and objective symptoms may be linked together. Nausea (subjective) may precede vomiting (objective). Nail-biting (objective) may accompany anxiety (subjective). When the patient experiences an itching sensation (subjective) he may scratch the area (objective).

OBJECTIVE 4

Distinguish among the four basic assessment techniques used in physical assessment.

There are four basic assessment techniques that all examiners use to obtain data. These techniques require the use of the nurse's senses.

Inspection means looking. We examine the skin by inspection. We can tell how the patient moves his extremities by inspection. We use inspection constantly in our dealings with patients.

Palpation means feeling. We palpate the radial artery to count the pulse. We palpate the abdomen for signs of tenderness. We palpate the skin for warmth or moisture.

Auscultation involves listening. We auscultate the lungs for breath sounds or the abdomen for bowel sounds. We are using auscultation when we take blood pressure.

Percussion involves tapping. Nurses do not use this technique as much as the physician. Tapping over the chest or abdomen will reveal to the experienced examiner the presence of fluid under the area percussed. The knee-jerk reflex is elicited by tapping.

While not always recognized as a distinct technique, the nurse's sense of smell is important during assessment. A strong odor of urine, foul-smelling wound drainage or a very sweet odor of the breath could be important assessment findings.

OBJECTIVE 5

Identify equipment used in physical assessment.

The equipment used during a physical examination will depend upon the examiner and the patient. The nurse must be able to identify various pieces of equipment and be able to assist in their use and care. Equipment which may be needed and their uses include:

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Stethoscope — Auscultation of blood pressure, apical pulse, breath sounds and bowel sounds

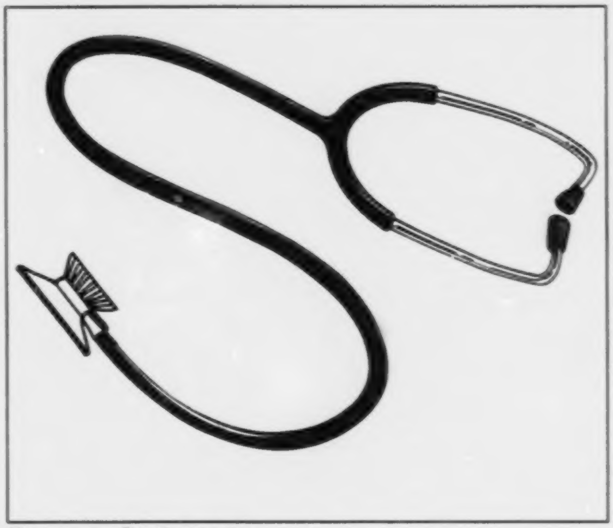

Figure 1 Stethoscope

Otoscope — Examination of the ears

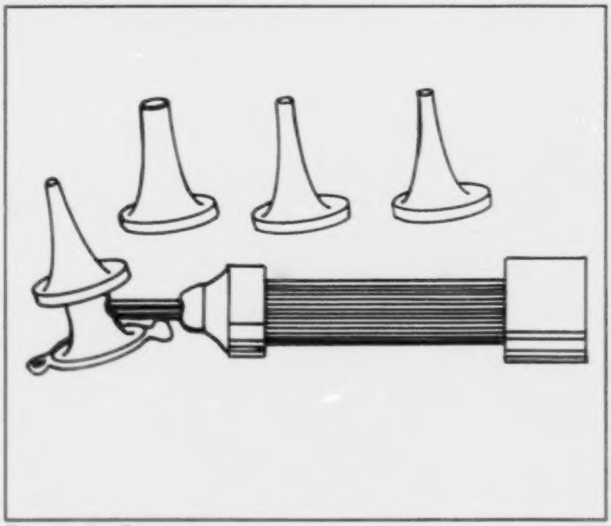

Figure 2 Otoscope

Ophthalmoscope — Examination of the eyes.

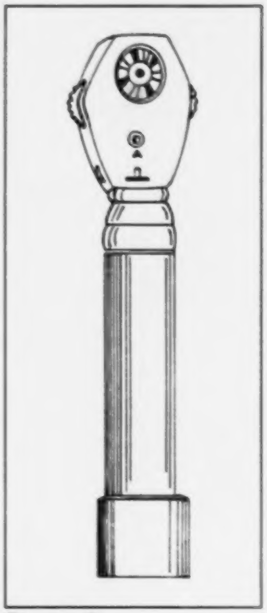

Figure **3**
Ophthalmoscope

NOTE: This instrument may consist of one base with interchangeable otoscope and ophthalmoscope heads.

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Tongue blade — Restraining the tongue for examination of the throat

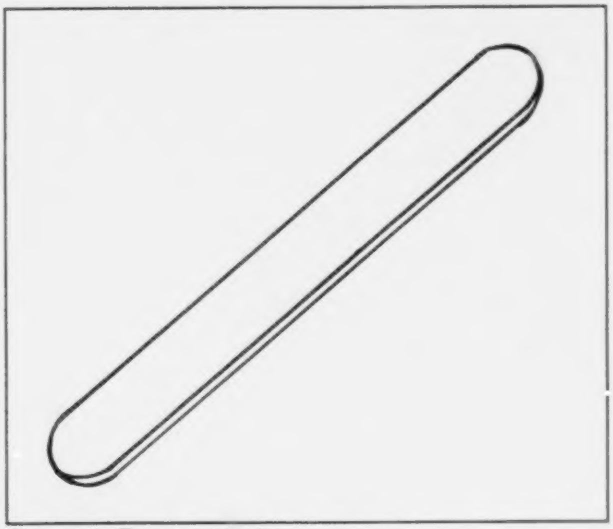

Figure **4** Tongue blade

NOTE: A broken tongue blade may also be used to elicit some reflexes.

Flashlight, penlight or other light source — Used to determine pupil reaction and to look into body cavities

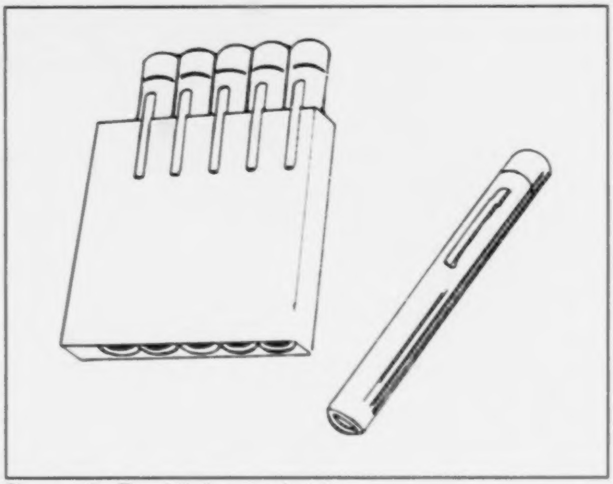

Figure **5** Flashlight, penlight

Gloves — Either clean or sterile gloves, or both, may be needed for examination of body cavities or handling specimens

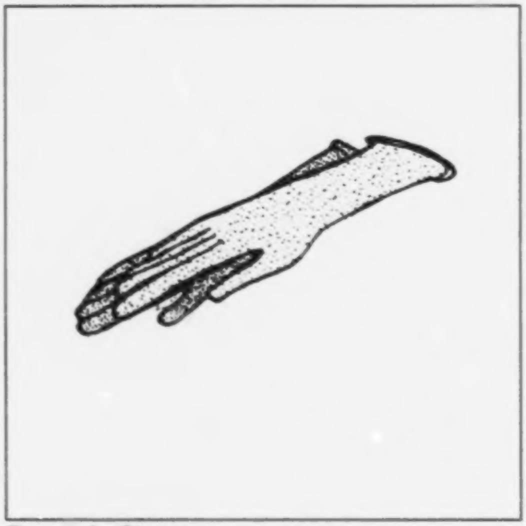

Figure **6** Gloves

Vaginal speculum — Examination of the vagina and cervix

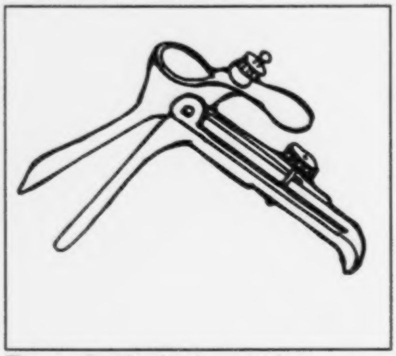

Figure **7** Vaginal speculum

Percussion hammer — Eliciting reflexes.

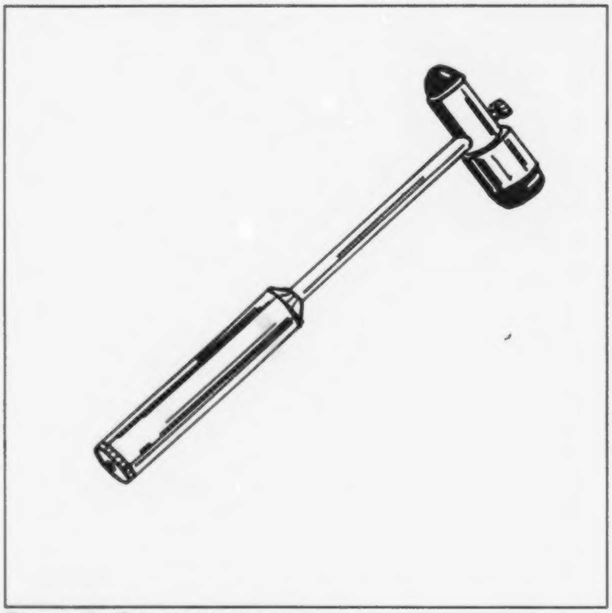

Figure **8** Percussion hammer

Cotton tipped applicators (Usually sterile) — Collecting specimens.

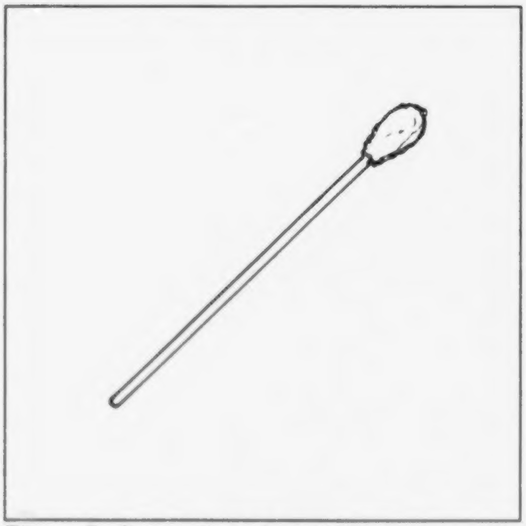

Figure **9** Cotton tipped applicators

Wooden spatula — Collecting material for Pap smear

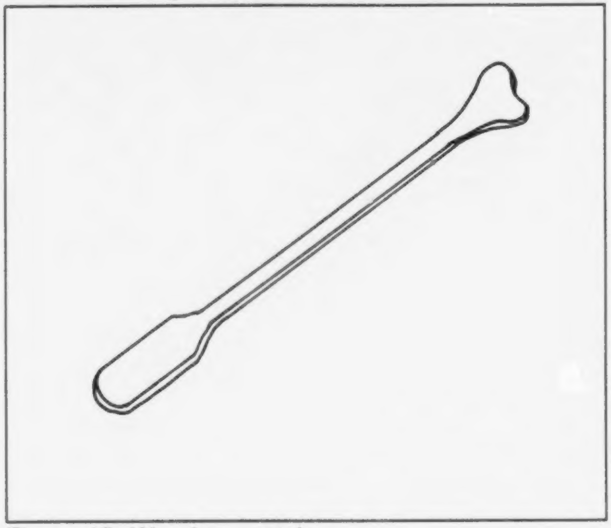

Figure **10** Wooden spatula

Test tubes, culture plates, and slides — Collection of various specimens.

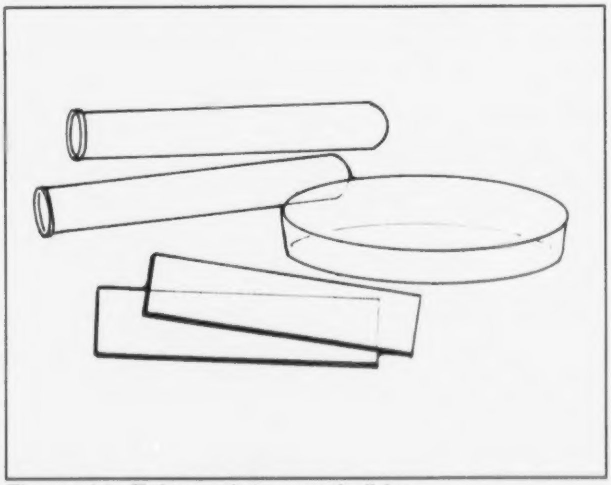

Figure **11** Tubes, plates, and slides

Examiners who are specialists in fields such as ophthalmology, otorhinolaryngology or neurology may require special equipment.

Tuning fork — Used to assess hearing or used in neurological testing to assess the patient's ability to detect vibration.

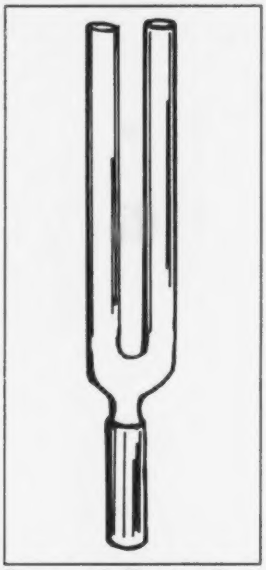

Figure **12** Tuning Fork

OBJECTIVE 6

Identify positions used in physical assessment.

Various positions can be used at different points in the physical examination. Included are several positions which are not especially comfortable. These are limited to specific examination situations.

Dorsal recumbent

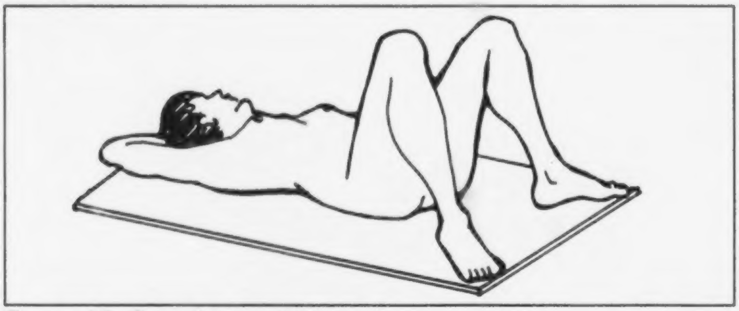

Figure **13** Dorsal recumbent

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Lithotomy

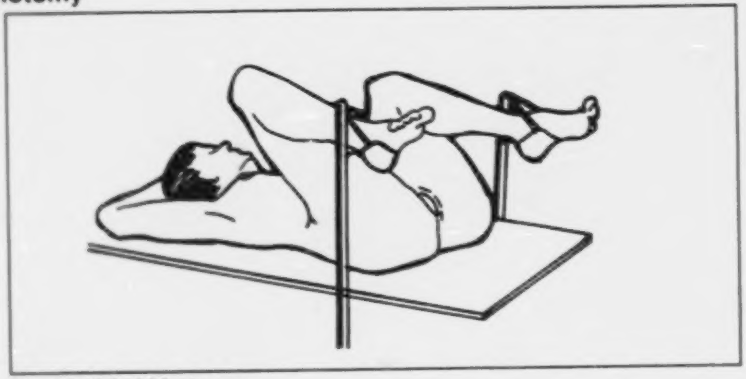

Figure **14** Lithotomy

Knee-Chest or Genupectoral

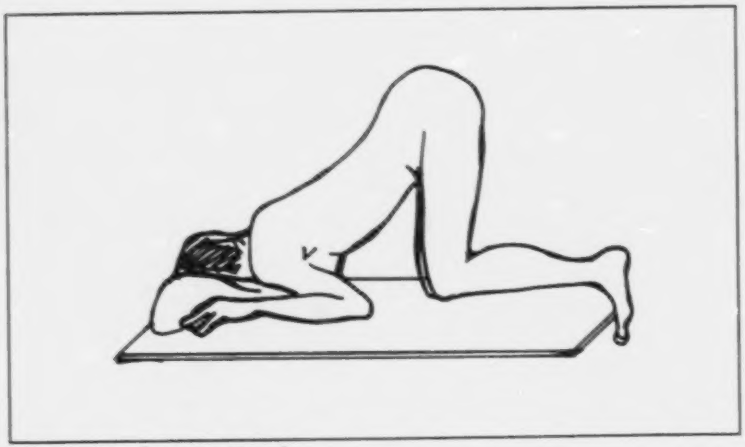

Figure **15** Genupectoral

Sim's

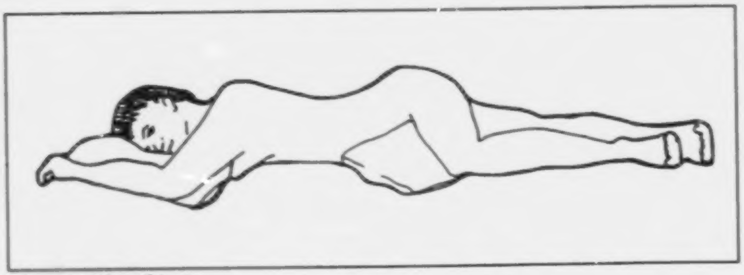

Figure **16** Sim's

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OBJECTIVE 7

Match assessment positions to the exams for which they are used.

Dorsal recumbent — Pelvic and rectal examinations

Lithotomy — Pelvic and rectal examinations

Knee-chest or genupectoral — Rectal and colon examinations

Erect or standing — Spine and musculoskeletal system in general

Sitting — Head and chest

Supine or horizontal recumbent — Chest (especially breast examinations) and abdomen

Prone — Posterior surfaces of the body

Side-lying — Assessment of posterior chest when patient is in weakened position

Sim's — Rectal examination

OBJECTIVE 8

Choose the correct word or phrase to complete statements about responsibilities of the nurse when assisting with a physical examination.

While assisting with a physical examination, the nurse has responsibilities to both the examiner and the patient. When the nurse fulfills these responsibilities, the examination will go smoothly and the patient will be more comfortable physically and psychologically.

Usually the nurse gathers some preliminary data before the examiner sees the patient. These might include temperature, pulse, respiration, blood pressure, weight and height. The nurse may also record information such as the onset of symptoms, allergies, or the date of a female's last menstrual period.

Gathering and preparing equipment is one of the nurse's first responsibilities, so he or she must know what the examination will include. Sometimes the nurse may have to ask the examiner exactly how extensive the examination will be. Then all equipment can be ready, avoiding delay and possible discomfort to the patient. Any electrical or battery-operated equipment should be checked ahead of time for adequate functioning. Sterile equipment should be sterile and clean equipment should be clean. Containers for specimens to be collected should be available.

The patient should be prepared physically and psychologically. Explanation of what will take place will increase cooperation. The patient may have some questions about the examination which the nurse can answer. In some instances, the nurse may be responsible for having permits signed for special examinations.

Assisting the patient to prepare physically may include removing or replacing gowns or clothing. The patient may need to be told how examination gowns should be worn or how much clothing to remove. Material for draping should be supplied.

The nurse may have to assist the patient in assuming necessary positions. The patient should not be asked to assume any uncomfortable position until the examiner is ready to proceed with the examination.

During the examination itself, the nurse will assist the patient by helping with position changes and in some cases, by supporting or holding the patient in position. The nurse can help meet the self-esteem needs of the patient by keeping the patient covered except when exposure is absolutely necessary.

Some patients will require comforting and reassurance during parts of uncomfortable examinations. Reminding patients of relaxation techniques like taking slow deep breaths may make the examination go more smoothly. The nurse will often be in a better position than the examiner to observe the effects of what is being done to the patient. This could include pain, weakness, or changes in pulse or respirations.

The nurse will assist the examiner by supplying necessary equipment at the correct time. It may be the nurse's responsibility to adjust or hold lights or to turn power sources on and off.

At the conclusion of the examination, the nurse should make the patient comfortable and assist as necessary with dressing or repositioning. If lubricant has been used, tissues should be supplied to the patient for removing any excess. If the patient cannot complete this task, the nurse should do it for the patient. The patient may have additional questions at this time for the nurse. Repetition of the examiner's instructions or explanations may be necessary.

All equipment should be discarded or cleaned and stored in an appropriate manner. Used supplies should be replaced, ready for use by others at a future time.

Any specimens collected should be labeled and sent for examination. Laboratory requisitions must be completed correctly and completely. Remember that any material collected from the human body is potentially contaminated with pathogenic organisms and should be handled as such.

Documentation of the examination should be completed in accordance with the policies of the institution where the examination takes place. Any observations of the patient's abilities and cooperation during the examination might be included. The patient's reactions and complaints during the examination would be pertinent. The fact that specimens were collected and what was done with them should be documented. Documentation in some settings would include recording charges for the services performed by the examiner.

OBJECTIVE 9

Choose the correct word or phrase to complete statements about types of physical assessment.

Various types of assessments are done, depending upon the information needed. The names give us an idea of the type of information obtained.

The **admission assessment** is quite detailed and performed when the patient first enters the health care setting. It includes a thorough physical assessment to gain baseline information for use in planning nursing care and for later comparison. The model on the next page describes the type of information appropriate at this time.

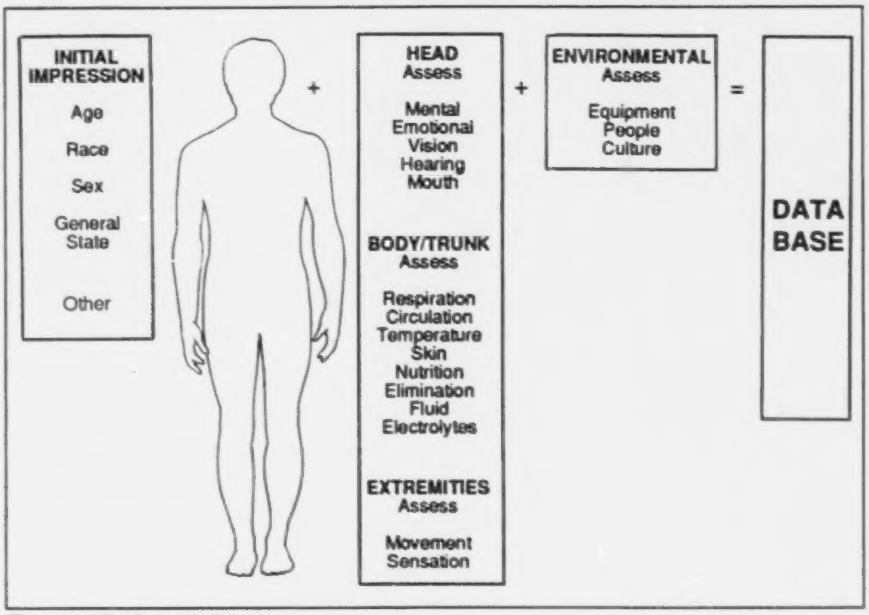
INITIAL IMPRESSION
Age
Race
Sex
General State
Other
+
HEAD
Assess
Mental
Emotional
Vision
Hearing
Mouth
BODY/TRUNK
Assess
Respiration
Circulation
Temperature
Skin
Nutrition
Elimination
Fluid
Electrolytes
EXTREMITIES
Assess
Movement
Sensation
+
ENVIRONMENTAL
Assess
Equipment
People
Culture
=
DATA BASE

Figure **17** Admission

The **initial assessment** is completed as the nurse begins caring for a patient at the beginning of a shift or time period. It may not be as complete as an admission assessment, but the nurse still needs to know the patient's status in order to detect changes occurring in the next few hours. The following guideline could help with a head-to-toe initial assessment.

NOTE: The head-to-toe order is usually used. This order generally proceeds from cleaner to dirtier areas of the body and serves as a guideline to assure completeness.

- What is the patient doing?
- What is the patient's general neurological status, considering especially orientation and level of consciousness? Pupil reaction may also be considered.
- What is the patient's overall skin condition, including color, temperature and moisture? Include the mucous membranes and capillary refill.
- What is the status of the apical pulse rhythm and quality?
- What are the auscultated breath sounds like?

- What is the condition of the patient's abdomen when assessed by auscultation, inspection, and palpation?
- What is the general condition of the patient's extremities especially in relation to movement? Is there a positive Homan's sign?
- What materials or equipment are attached to the patient and what is the functioning of each?
- What special equipment is ready for use?
- Does the patient have any complaints?

Focus assessments involve a specific set of observations. If the patient has had surgery, we will observe the surgical site frequently. If the patient has asthma, we will be particularly interested in respiratory status. If the patient has an IV, we will check that site. We focus on the areas most likely to give the patient problems. In some cases, the focus assessment involves a specific body system, and in other cases, involves data from several systems. The neuro check and neurovascular check are important focus assessments.

The **neuro check** or neurological assessment may be done if there is doubt about the functioning of the central nervous system such as after a stroke or head injury. A complete neurological assessment can be very lengthy, but this brief assessment gives a picture of neurological functioning. Assessment factors include:

- **Blood pressure** — Is it within normal limits? A widening pulse pressure is a danger sign.
- **Level of consciousness** — Is the patient alert and responding appropriately to verbal stimuli? Is he oriented to person, place, and time? Does it take shaking, shouting or painful stimuli to arouse him? Is there only reflex movement or none at all?

— **Pupil reaction** — Are the pupils equally round? Do they constrict when a light is shined into the eyes and dilate when the light is removed? Is the response equal and rapid? The abbreviations PERLA (pupils equally reactive to light and accommodation) or PERRLA (pupils equally round, reactive to light and accommodation) could be used for a normal reaction. Pupil size is measured in millimeters, with 4-5 normal for most adults.

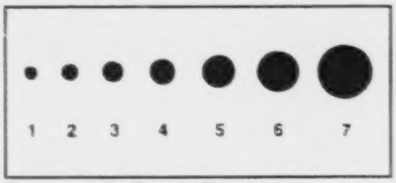

Figure **18** Pupil Gauge*

— **Motor function** — Does the patient move appropriate extremities on command? Can he grip the examiner's fingers equally with both hands? Can he push with the feet equally against the examiner's hands?

NOTE: Many facilities have a neuro check flowsheet where the information is recorded, making it easier to see any changes in neurological status. Numerical values are assigned to each assessment factor consistent with the Glasgow Coma Scale, a widely recognized standard for neurological assessment.

The **neurovascular or neurocirculatory** assessment is done when there is reason to expect that something could be constricting a body part, such as a cast on a limb, anti-embolism stockings, a limb restraint, or an ace wrap. The following factors are assessed:

- **Skin color** — The nail beds should be pink. They are extensions of the skin and the same color regardless of skin color. Cyanosis, duskiness, mottling or pallor should all be causes for concern.
- **Capillary refill** — Press a finger against the skin or nail which has the effect of pushing blood out of the capillaries causing a change in color. Release of pressure should allow a rush of color to return.

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- **Edema** — If there is a constricting force, the flow of fluid away from the area will be affected, resulting in edema or an accumulation of fluid in the area. Comparing an affected with an unaffected limb helps to determine if edema is truly present.

- **Temperature** — A decreased circulation will cause the skin to feel cool to touch. Warmth indicates adequate circulation.

- **Pulse** — The pulse should be palpated beyond the potential constriction. If there is a cast on the forearm, we would assess a radial pulse. If the patient were wearing anti-embolism stocking we would assess a pedal pulse. If the pulse is not palpable, circulation is inadequate.

- **Movement** — We ask the patient to move the part below the potential constriction. We may ask him to wiggle his fingers or toes. Edema may make movement difficult or painful, but this check tells us especially about the neurological stimulation to the area. If it is decreased, movement will be weak or absent.

- **Sensation** — Without the patient looking, we touch an area and ask the patient to identify the part. If he can properly identify the little finger or the big toe we know that messages are being carried as they should be. Complaints of numbness, tingling, burning, or pain can also be danger signals.

OBJECTIVE 10

Choose the correct word or phrase to complete statements about guidelines for assessing the skin.

Assessment of the skin includes observing color, temperature, moisture on the skin surface and within the layers of the skin, and noting the presence of any lesions or area of abnormalities. The mucous membranes and nails are extensions of the skin. If it is difficult to determine skin color, the mucous membranes of the mouth and the conjunctiva of the eye are easily assessed.

The skin of Caucasians should be pink. Appropriate color in blacks, native Americans, or Oriental people is assessed by inspecting the color of the nails and mucous membranes. These should be pink.

Possible observations in relation to color are:

- **Pallor** (pale, pallid) — Lack of color, white appearance often seen first in the conjunctiva of the eye

  Note: Pallor is a noun: Ex. "Pallor noted." Pale and pallid are adjectives: Ex. "Pale conjunctiva."

- **Cyanosis** — Bluish discoloration of the skin often seen first around the lips and in the nailbeds, indicating lack of circulation to the area

- **Jaundice** — Yellowish discoloration of the skin often seen first in the sclera

- **Erythema** — Reddened area of the skin

- **Mottling** — Unevenly distributed bluish or purplish areas over the skin

- **Necrotic** — Gray or black area associated with dead or dying tissue

Palpation of the skin will tell us whether the skin is warm, hot, cool, or cold. Warm skin would usually indicate lack of problems in temperature regulation and circulation.

Palpation also tells us whether the skin is dry or moist to touch. **Diaphoresis** is a term which tells us that the patient is perspiring profusely.

We are also interested in the moisture within the layers of the skin, or the skin **turgor**. We determine turgor by lightly pinching together a fold of skin and watching to see how long it takes to rebound. Another way to describe turgor is the elasticity of the skin. Decreased moisture causes the folds to stay together and rebound slowly. Poor turgor or reduced elasticity is seen in dehydration. Adequately hydrated skin rebounds rapidly. Skin turgor also changes with aging when there is less moisture within the layers of tissue.

Edema is an accumulation of fluid within the layers of skin. The presence of edema is a sign of circulatory problems. Edematous areas look puffy and perhaps shiny. Depressions made by pressing on the edematous areas are slow to regain normal contours.

Lesion is a general term which can be helpful in describing any abnormality noted in examining the skin. The exact location should be described along with approximate size, color, the presence of any drainage, any elevation above the level of the skin, and any other identifying information. It may be useful to think of coin sizes in describing size of lesions.

Lesions include:

- **Excoriation** — A "rubbed" or scraped area of the skin
- **Ecchymosis** — A bruise. A discolored area produced by a blow to the area. A recently produced ecchymosis will show black, blue, and purple colors, while an older one will show brown, yellow, and green colors.
- **Petechiae** — Small purplish hemorrhagic areas
- **Laceration** — A jagged cut
- **Abrasion** — Area where skin has been removed by scraping or scratching
- **Fissure** — Crack in the skin
- **Scar** — Mark left after healing
- **Ulcer** — Craterlike area

Drainage from a lesion or wound could be described as:

- **Serous** — Clear, colorless fluid
- **Sanguineous** — Bloody drainage
- **Serosanguineous** — Pink-tinged clear fluid
- **Purulent** — Containing pus
- **Mucoid** — Containing mucus
- **Mucopurulent** — Containing mucus and pus

In assessing the skin, it is important to include the lower extremities. Many of the things we assess about the skin tell us something about the circulatory status of the body. Circulatory changes often affect the lower extremities first. If we neglected them, we would miss some important data.

EXAMPLES: Edema of feet and ankles, absence of hair on legs.

OBJECTIVE 11

Choose the correct word or phrase to complete statements about guidelines for physical assessments.

Assessment data from various body systems give a picture of the overall health of the body. By moving over the body in a systematic way the nurse assesses the body's functions. The nurse should be aware of the assessment methods and findings connected with different areas of the body. Most assessments proceed in a head-to-toe fashion and would include observation of the following data:

CHEST ASSESSMENT

The apical pulse should be auscultated. An experienced practitioner can detect sounds at different points over the heart. Heart murmurs are detected in this manner. Most practical nurses will be interested in a very limited assessment of apical pulse. Assessment of the rate, rhythm, and strength of the beat at the apex of the heart should be sufficient for the practice of most practical nurses.

The body's foremost need is for oxygen and assessment of the chest evaluates the body's ability to utilize oxygen. Inspection of the chest will determine the respiratory rate, rhythm, and depth. The nurse should look at the movements of the chest during respirations as well as assess the general shape of the chest. Changes in chest shape accompany some chronic respiratory problems.

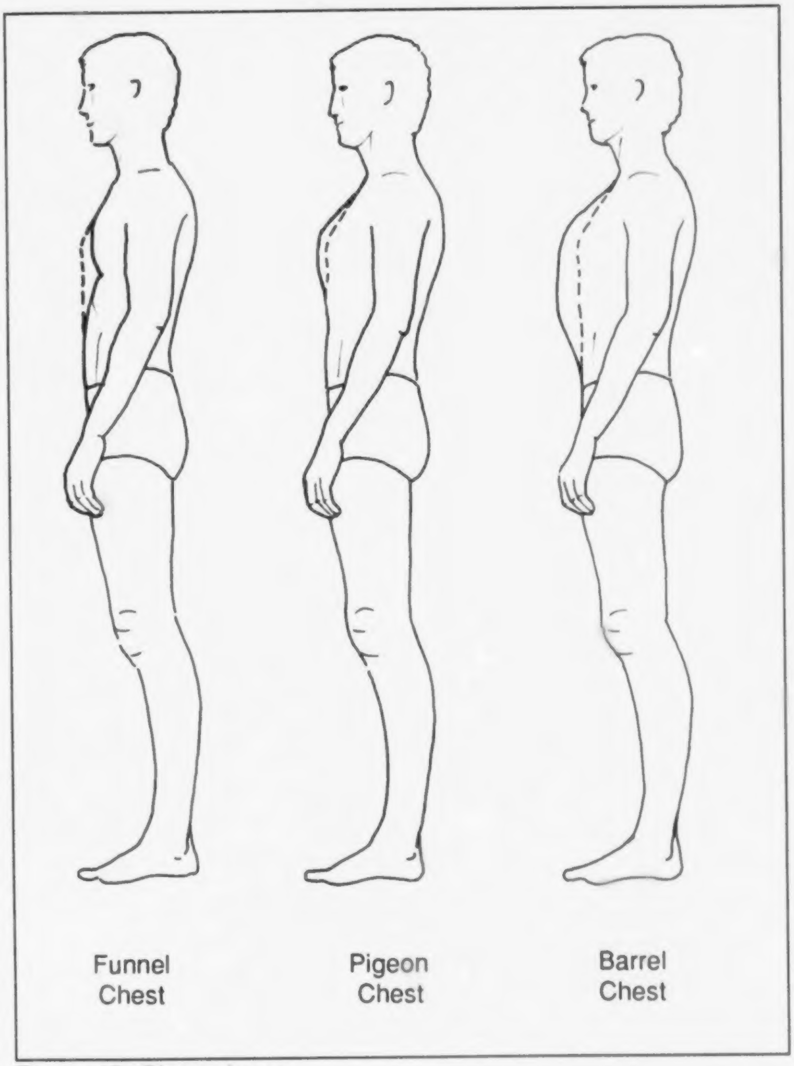
Funnel Chest
Pigeon Chest
Barrel Chest

Figure **19** Chest shapes

1602

Sounds associated with respirations provide important data. Audible sounds are those heard without aid of a stethoscope, such as **stertor**, a low pitched, snoring sound; or **stridor**, a high pitched, crowing sound. Perhaps the most common audible sound is wheezing, a whistling sound. All signal respiratory problems.

Auscultation of the chest with a stethoscope is one of the important techniques of respiratory or chest assessment. By auscultation, the nurse is trying to determine if air is moving freely and equally in all areas of the lungs. Extra sounds or changes in the quality of the sounds signal problems.

(A systematic assessment moves from the shoulders downward to the diaphragm and from side to side. The nurse is comparing the sounds of one side to the other as well as sounds in the upper lung fields to the lower lung fields.) Anterior, posterior, and lateral surfaces should be considered. (It will help if the patient will breathe in and out through the mouth as the nurse listens.) The nurse should then hear air passing in and out of the lungs and trachea.

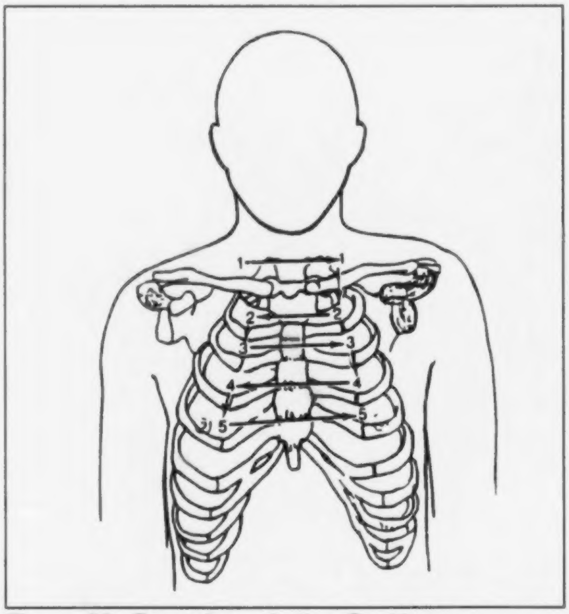

Figure **20** Front Auscultation Positions

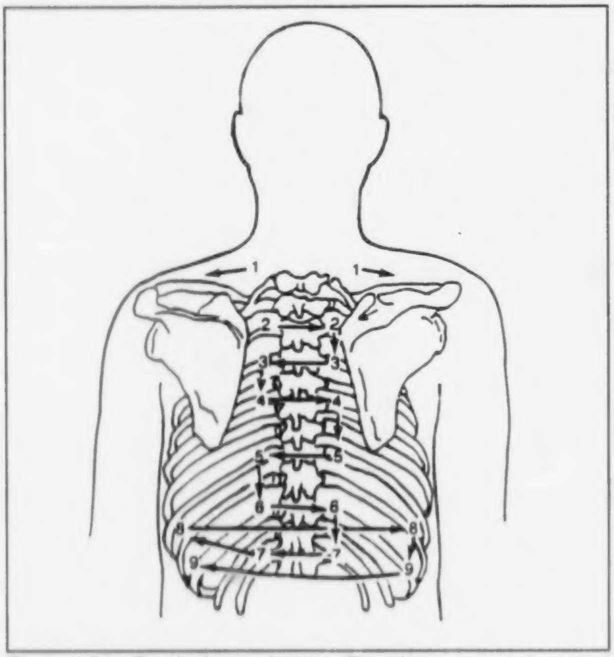

Figure **21** Back Auscultation Positions

Abnormal sounds are called **adventitious** sounds. The adventitious sounds which may be heard are:

- **Crackles** (rales) — Fine crackling sounds usually heard during inspiration
- **Gurgles** (rhonchi) — Coarse, harsh, gurgling sounds usually heard on expiration
- **Wheezes** — Musical or whistling sound heard on inspiration or expiration
- **Pleural friction rubs** — Grating sound usually heard over lower anterior and lateral chest

It takes practice to recognize which sound is auscultated. If it is difficult to determine exactly which sound is present, the nurse may choose to say that the lungs are congested. This tells the reader or listener that breath sounds are not clear and equal bilaterally and that additional investigation is needed.

The physician and some nurses may use palpation and percussion techniques to obtain additional information. These are advanced techniques and are not generally used by practical nurses. The practical nurse should be able to distinguish clear, normal lung sounds from congested or adventitious sounds. The practical nurse should also be able to describe the location of the abnormality in the right or left and upper or lower lung fields.

ABDOMEN

After the chest examination is completed, the nurse should move to the abdomen. The abdomen should be examined by auscultation, inspection, and palpation. Auscultation should be attempted before palpation, because palpation may increase the peristaltic movements or bowel sounds that we are listening for. We imagine the abdomen as being divided into four quadrants and we place the stethoscope over each quadrant. A gurgling or rushing noise should be heard. These are the movements which take place during normal digestion. With experience, the nurse will be able to detect changes in pitch as well as hypoactive or hyperactive bowel sounds.

Inspection will reveal any wounds, scars, or changes in coloration. Distention or swelling may also be apparent by inspection. Palpation should also cover all four quadrants. The normal abdomen will be soft with tissue easily moved. A hard or rigid abdomen is a danger sign. Possible distention observed by inspection may be confirmed by palpation. A distended abdomen is not a soft abdomen. The nurse should also note the patient's reaction to palpation. Normally the abdomen is not tender. In other words, the patient should not feel pain to palpation. If pain or tenderness is present, the area should be described by quadrant. It is possible to feel the location of abdominal organs by deep palpation, but this is not usually a skill of the practical nurse.

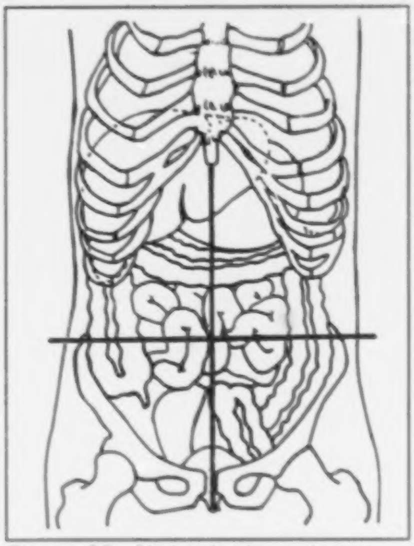

Figure 22 Abdominal quadrants

GENITOURINARY

Note any urethral or vaginal drainage. Inspect the perineum for lesions, edema, or discoloration.

EXTREMITIES

The extremities should be examined to see that there is no limitation in movement. The joints should receive careful inspection for signs of deformity, pain, or swelling. The two upper extremities and the two lower extremities should be symmetrical in appearance and movement. This examination should also determine the presence of skin lesions or edema.

Remember to include the legs. They are more likely to be covered by clothing or bedding and therefore forgotten. Many changes which will later affect the rest of the body may first be apparent by careful examination of the legs. Edema or discoloration are prime examples. The nurse should dorsiflex the foot or bend the toes back toward the rest of the body. If pain is present in the calf muscles, this is called a positive Homan's sign, an indication of a deep phlebitis or inflammation of veins.

THERAPEUTIC EQUIPMENT

During the head-to-toe examination of the patient's body, the nurse may encounter various items being used in the treatment of the patient's condition. Dressings, tubes draining or supplying fluids, casts, anti-embolism stockings, and other devices may be present. All should be examined and documented. The name and location of the equipment should be stated, as well as its state of functioning.

Any equipment present, such as suction machines or tracheostomy sets, should be noted and checked for proper function. It could be critical that these items are ready to use in an emergency situation.

Specific assessments should include:

- **IV fluids** — Type, amount, rate, site, such as: right or left hand, wrist, forearm, ante-cubital area, upper arm; condition of site and the presence of an infusion pump
- **Nasogastric tubes** — Purpose, location, and function, such as: #14 Fr. N/G in R Nare connected to low Gomco suction **or** clamped; fluid draining or being supplied, such as: draining dark green liquid **or** tube feeding running per pump c̄ HOB ↑ 30°
- **Dressings** — Exact site, such as: LUQ of abdomen or right hip; condition, such as: dry and intact
- **Wound suction or drainage devices** — Type, such as: Jackson-Pratt drain, Hemovac; site, appearance of drainage

  NOTE: Some nurses may estimate the amount of drainage present.
- **Catheter** — Type, such as: Foley catheter, supra-pubic catheter; appearance of drainage, such as: straw-colored urine
- **Drainage bags** — Type, such as: colostomy, ileostomy, ureterostomy; appearance of drainage, such as: brown liquid

- **Casts, splints, immobilizer, slings, traction** — Name, location, condition, such as: Cast wet **or** bloody drainage noted on cast

  NOTE: Include a neurovascular check of the area below the device.

- **Restraints** — Name, such as: jacket, limb; location (type may describe location)

  NOTE: It is a good idea to note that the restraint is secured to the bedframe. A neurovascular check may also be in order.

- **Oxygen** — Method of delivery, such as: nasal cannula, mask, rate of delivery, such as: 3L/min. **or** 40% concentration
- **Ventilator** — Machine settings, method of delivery, such as: Endotracheal tube
- **Tracheostomy tubes**
- **Endotracheal tubes**
- **Anti-embolism stockings or Ace wrap**

  NOTE: Include neurovascular check.

- **Pillows or devices for elevating body part** — Location
- **Icebags, hot wet packs, aqua-K pad** — Location, condition of site

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LEVELS OF CONSCIOUSNESS (LOC)

LOC	CHARACTERISTIC RESPONSE
ALERT	• Awake • Responds appropriately to auditory, tactile, and visual stimuli; oriented to person, place, and time
LETHARGIC	• Sleeps often • Arouses easily; responds appropriately
OBTUNDED	• Aroused by shaking or shouting; responds appropriately • Returns to sleep
STUPOROUS	• Responds only to painful stimulus • Withdraws finger or pushes your hand away (purposeful movement) • Not completely awake during stimulation
SEMICOMATOSE	• Responds only to painful stimulus • Performs reflex movement, such as decerebrate posturing
COMATOSE	• Shows no response; shows no reflexes • Exhibits flaccid muscle tone in arms and legs

Figure **23***

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ACTIVITY SHEET 1

ASSESS THE PATIENT

OBJECTIVE AND SUBJECTIVE SYMPTOMS

Decide whether the following symptoms are objective or subjective by marking an X under the correct category.

SYMPTOM	OBJECTIVE	SUBJECTIVE
1) Swelling		
2) Vomiting		
3) Anxiety		
4) Dizziness		
5) Bruise		
6) Fever		
7) Pain		
8) Nausea		
9) Rash		
10) Limping		
11) Coughing		
12) Cyanosis		
13) Weak pulse		
14) Wound drainage		
15) Numbness		

Basic skills listed on back.

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Functional Reading Skills
- Use content area vocabulary

Life Science Skills
- Investigate health issues (medical, ergonomic, nutrition, mental health)

ASSESS THE PATIENT

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 1

Skill development for: READING SKILLS
SCIENCE SKILLS

- Introduce the assignment to the students by discussing why reading and science skills are important.

- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  — Using content area vocabulary

  SCIENCE SKILLS

  — Investigating health issues

- If students have difficulty using content area vocabulary:

  — Stress the importance of learning medical terminology.

  — Recommend the use of the association technique to help memorize the new terms

    - Association — Connecting a new term to something you already know.

      EXAMPLE: Vomiting is *ob*vious and *ob*jective.
      Nausea is *sub*tle and *sub*jective.

- If students have difficulty investigating health issues, discuss the ways to recognize symptoms.

  EXAMPLE: Inspection = Seeing: Bruise, rash
  Auscultation = Hearing: Cough, sneeze
  Percussion = Tapping: Slow reflexes
  Palpation = Feeling: Weak pulse, damp skin
  Smelling: Odor of infection
  Asking patient: Anxiety, fatigue
  Scientific measurement: Blood pressure, temperature

ASSESS THE PATIENT

Operation and Calculation Skills
- Round off numbers
- Calculate with whole numbers
- Calculate with decimals
- Calculate with metric measure
- Convert whole numbers and decimals
- Solve formulae and equations
- Convert units of measure

Math Application Skills
- Solve word problems
- Select/apply mathematical formula
- Use English and metric measures

Data Analysis and Display Skills
- Interpret charts and tables

Functional Math Skills
- Solve practical problems

HEIGHT AND WEIGHT CONVERSIONS

Some health care facilities record height and weight using the metric system: grams (Gm.), kilograms (Kg.), and centimeters (cm.). Others use the more familiar ounces (oz.), pounds (lb.), inches (in.) and feet (ft.). The nurse may have to change measures of height and weight from one system to another for recording or interpretation to patients. The following table gives conversion information.

16 ounces	1 pound
2.2 pounds	1 kilogram
1000 grams	1 kilogram
12 inches	1 foot
2.5 centimeters	1 inch

EXAMPLE 1: The patient weighs 50 kilograms or 110 pounds.
(50 x 2.2 = 110)

EXAMPLE 2: The patient weighs 145 pounds or 65.9 kilograms.
(145 ÷ 2.2 = 65.0 kilograms)

EXAMPLE 3: The patient's height is 165 centimeters or 66 inches.
(165 ÷ 2.5 = 66 inches)

EXAMPLE 4: The patient's height is 66 inches or 5 feet 6 inches.
(66 ÷ 12 = 5.5 feet and .5 feet = 6 inches)

EXAMPLE 5: The patient's height is 60 inches or 150 centimeters.
(60 x 2.5 = 150 centimeters)

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Solve the conversion problems below.

1. A patient weighs 75 kilograms. Convert the weight to pounds.

2. A patient weighs 40 kilograms. Convert the weight to pounds.

3. A patient weighs 130 pounds. Convert the weight to kilograms. (Round to the nearest tenth)

4. A patient weighs 215 pounds. Convert the weight to kilograms. (Round to the nearest tenth)

5. An infant weighs 3400 grams. Convert the weight to pounds and the nearest whole ounce.

6. A patient is 66 inches tall. Convert the height to feet and inches.

7. A child is 32 inches tall. Convert the height to feet and inches.

8. A patient is 63 inches tall. Convert the height to centimeters.

9. A patient is 180 centimeters tall. Convert the height to feet.

10. An infant is 51.25 centimeters long. Convert the length to inches.

INSTRUCTIONAL SUPPLEMENT FOR ACTIVITY SHEET 2

Skill development for: MATHEMATICS

- Introduce the assignment to the students by discussing why mathematics skills are important.
- Discuss with them the following skills which are relevant to this task:

  MATHEMATICS SKILLS

  - Rounding off numbers
  - Calculating with whole numbers
  - Calculating with decimals
  - Calculating with metric measures
  - Converting whole numbers and decimals
  - Solving formulae and equations
  - Converting units of measure
  - Solving word problems
  - Selecting/applying mathematical formula
  - Using English & metric measures
  - Interpreting charts and tables
  - Solving practical problems
- If students have difficulty rounding off numbers, review the basic skills for rounding off numbers.

EXAMPLE: If a decimal number is 5 or more, change the digit to its left to the next higher number. If the number is 4 or less, leave the number to the left as it is.

- If students have difficulty calculating with whole numbers, review basic addition, subtraction, multiplication and division.
- If students have difficulty calculating with decimals:
  - Review basic skills for working with decimals.
  - Remind them that our money system is a decimal system.
- If students have difficulty calculating with metric measure, suggest that they review and memorize basic conversion formulas.
- If students have difficulty converting whole numbers and decimals or converting units of measure, discuss the concept of whole numbers and fractions of numbers. Explain that they should create as many whole "sets" as possible.

EXAMPLE: If a man is 69 inches tall, divide the 69 inches into whole sets of 12 (12 inches in a foot) to convert the inches to feet. 69 divided by 12 equals 5 feet 9 inches.

- If students have difficulty solving formulae and equations:
  - Review the symbols used in math.
  - Point out that the equal sign means that the value of the right side of the equation must equal the value of the left side of the equation.

EXAMPLE: 66 inches = 165 centimeters
66 inches × 2.5 centimeters per inch =
165 centimeters

- If students have difficulty solving word problems or practical problems, instruct them to find the key elements of the problem.

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EXAMPLE: On Monday, Mr. Heavy weighed 210 pounds. Convert the weight to kilograms. The key elements are 210 pounds and kilograms. Using basic conversion formulas and key elements, calculate the answer.

- If students have difficulty selecting and applying math formulas, instruct the students to reword the problem in a form that is clearer to them.

EXAMPLE: Convert 20 inches to centimeters.
Reword: If there are 2.5 centimeters in one inch, how many centimeters are there in 20 inches?

- If students have difficulty using English and metric measures, suggest that they look at a yardstick or tape that is marked in both English and metric and study the measurements until there is a concrete idea about the lengths of different units of measurement.

- If the students have difficulty interpreting charts and tables, review the purpose of the chart and define the elements.

EXAMPLE: A metric conversion chart is used to change measurements to a metric form.

2.5 centimeters .... 1 inch
could also be written
2.5 centimeters = 1 inch

ACTIVITY SHEET 1

1) Objective
2) Objective
3) Subjective
4) Subjective
5) Objective
6) Objective
7) Subjective
8) Subjective
9) Objective
10) Objective
11) Objective
12) Objective
13) Objective
14) Objective
15) Subjective

ACTIVITY SHEET 2

1. 165 pounds
2. 88 pounds
3. 59.1 kilograms
4. 97.7 kilograms
5. 7 pounds 8 ounces
6. 5 feet 6 inches
7. 2 feet 8 inches
8. 157.5 centimeters
9. 6 feet
10. 20.5 inches

JOB SHEET 1

ASSESS THE PATIENT

XII

OBJECTIVE 12a

Weigh a patient.

INTRODUCTION

Part of the nursing responsibility during physical assessment is to measure a person's weight. This is true for patients in an office or clinic, a nursing home, a hospital, or patients served by a home health care agency.

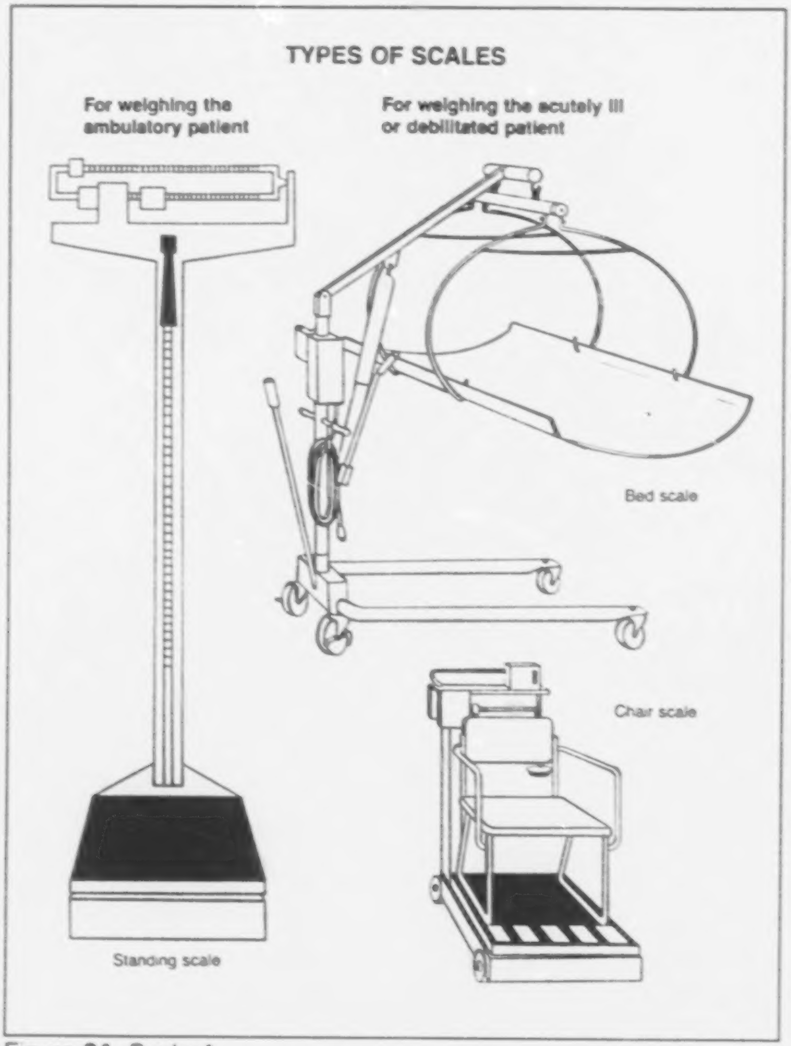
Weight is often the basis for calculating medication dosage. Weight and height together help in evaluating nutritional status. Weight loss or gain is an indicator of fluid balance. For these reasons, weight must be accurate for appropriate assessment and intervention.

For accurate comparisons, patients weighed on a regular basis should be weighed on the same scale with the same amount of clothing and preferably at the same time of day. The patient should not wear shoes.

EQUIPMENT

- Scale

  NOTE: The standing balance scale is used in many settings, and various other types of scales are available to meet patients' needs, such as the standing digital scale, bathroom scale, chair scale, and bed scale. There are patient lifts and lift chairs for whirlpool baths which double as scales. Scales for infants include a tray-like platform on which the infant lies.



TYPES OF SCALES
For weighing the ambulatory patient
For weighing the acutely ill or debilitated patient
Bed scale
Chair scale
Standing scale

Figure **24** Scales*

- Material for covering scale

PROCEDURE

Functional Reading Skill
- Interprets forms and records

Assessment and Analysis

1. Note age of patient

   NOTE: Infants up to about 18-20 months are usually weighed on the tray-like platform type scale.

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Functional Writing Skills
- Complete forms and records

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with co-workers
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/patients

2. Determine ability of patient to bear weight.
3. Determine ability of patient to assist in procedure.
4. Note any medical or nursing diagnoses which would alter procedure.

Planning

5. Enlist help as needed.
6. Wash hands.
7. Obtain correct scale or transport patient to scale.
8. Lock wheels of scale, if applicable.
9. Explain procedure to patient.
10. Assist patient in removing clothing and shoes as needed.
11. Ensure that scale is calibrated or balanced as needed.

Implementation

12. For standing balance scale:
    a. Place paper towel on platform to prevent bare feet from contacting scale.
    b. Assist patient as needed to step onto scale.

       NOTE: Be sure patient is standing with full weight on scale and nothing else is touching scale.

    c. Move large slide on bottom balance arm to the right at estimated position.
    d. Move the smaller slide on top balance arm to right until arm is balanced at midpoint.
    e. Add numbers where weights are resting on bottom and top balance arms to determine weight.

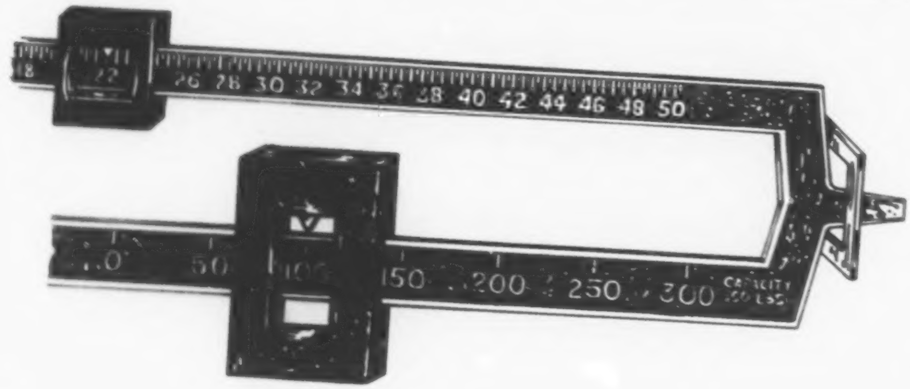

Figure **25** Scale measurements

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Interpret charts and tables (numerical)
- Collect/record data
- Interpret statistics

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (scale)

13. For bed scale:

NOTE: Exact procedure will depend upon type of bed scale available.

  a. Clean scale platform with disinfectant solution and/or place sheet over platform.

  b. Balance scale with sheet in place as necessary.

  c. Place patient on sheet for lifting to scale platform or on stretcher-type platform itself which has been disconnected from rest of scale.

  d. Move patient to platform or connect stretcher-type platform to rest of scale.

  e. Move scale platform so that it is free of the bed.

  f. Add weights to determine patient's weight or read digital display.

14. For chair scale:

  a. Assist patient to sit in chair.

  b. Add weights to determine patient's weight or read digital display.

15. For infant scale:

    a. Place disposable pad on scale platform.

    b. Balance scales.

    c. Place infant on scale platform.

WARNING!

FALL POSSIBLE. Infant can fall from platform if unattended. KEEP HAND ABOVE INFANT READY TO HOLD IF INFANT MOVES.

---

    d. Add weights to determine patient's weight or read digital display.

16. Assist patient from scale as necessary.

17. Assist patient to dress as needed.

18. Disinfect scale platform and/or dispose of material used to cover scale platform in appropriate manner.

Evaluation

19. Evaluate according to following criteria:

    a. Weight is within expected range for age and condition.

    b. Patient was able to cooperate in procedure.

Documentation

20. Record:

    a. According to agency policy.

    b. Any difficulty with procedure.

ASSESS THE PATIENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for:
READING
WRITING
MATHEMATICS
SCIENCE
ORAL COMMUNICATION
INTERPERSONAL OR RELATING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Interpreting charts and tables
- Collecting/recording data
- Interpreting statistics
- Making measurements

SCIENCE SKILLS

- Using scientific instrument (scale)

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with client/customer/patient

INTERPERSONAL OR RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with co-workers
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Dealing effectively with clients/customers/patients

- If students have difficulty with reading and writing skills:
  - Examine the structure of the forms or records.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty collecting and recording data:
  - Stress the importance of accuracy in recording data.

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  - Discuss the structure of the forms being used.

- For other suggestions on teaching Basic Skills in mathematics, refer to Instructional Supplement for Activity Sheet 2.

- If the students have difficulty using scientific instruments (scale), review the correct procedure for its use.

- If students have difficulty applying active listening skills:

  - Encourage them to familiarize themselves with the patient's history before communicating with the patient.

  - Practice listening and then repeating the information.

    EXAMPLE: Patient — "My left arm hurts."
    Student — "The pain is in your left arm?"

  - Stress the importance of focusing on the speaker.

  - Remind student that maintaining eye contact enhances listening ability.

  - Practice concentrating on the speaker and ignoring common distractions.

  - Suggest that they be ready to listen before beginning the communication.

- If students have difficulty giving/following oral directions:

  - Urge them to organize their thoughts before directions are begun.

  - Have them write basic directions for a procedure and review them as needed.

  - Say the directions and ask them to repeat them back to you.

  - Instruct them to be prepared and have their questions organized before the interview begins.

- If students have difficulty applying questioning techniques, stress the importance of accurate questioning to identify subjective symptoms.

- If students have difficulty analyzing/applying non-verbal communication, demonstrate the power of non-verbal communication to aid in working with a patient.

  EXAMPLE: If the student is nervous and rushed, the patient can become flustered and nervous. A calm, confident student may put an otherwise nervous patient at ease.

- If students have difficulty analyzing/applying non-verbal communication, discuss some ways in which patients reveal information non-verbally.

  EXAMPLE:
  Facial expressions
  Tone of voice
  Movements
  Body position
  Mannerisms

  — Discuss some ways in which the students can convey information non-verbally.

    EXAMPLE: The student can convey concern for the patient's comfort and self-esteem by adjusting draping during an exam.

- If students have difficulty communicating with a patient, have the student review listening skills, questioning techniques, giving/following directions, and non-verbal communication.

- If students have difficulty interacting with co-workers:

  — Explain the importance of teamwork.

  — Suggest that workers trade jobs in order to better understand how to assist one another.

  — Review listening skills, questioning techniques, giving/following directions, and non-verbal communication.

- If students have difficulty mastering the specific job task/procedure:

  — Suggest that they study each component of the procedure to discover which area is causing difficulty, then review and practice that area.

EXAMPLE: A student who is at ease communicating with the patient, but cannot accurately use the scale should review and practice measurement skills.

- Review the entire procedure.
- Team them with a proficient student or a professional and practice the procedure.

- If students have difficulty applying safety practices:
  - Discuss the reasons for and the importance of, each safety practice.
  - Instruct them in the use of various techniques to help them remember safety practices.
    - Visualization — Making a mental picture

      EXAMPLE: Visualize how an infant scale should look before placing the infant on the scale: Clean, disinfected, covered with clean disposable pad.

    - Association — Connecting new term with something you already know.

      EXAMPLE: Connect "disinfect the area" with a parents' rule to "clean your room."

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JOB
SHEET 2

ASSESS THE PATIENT

XII

OBJECTIVE 12b

Measure a patient's height/length.

INTRODUCTION

Height or length is assessed to help determine whether a patient's weight is appropriate. Many standing balance scales have an attachment for measuring height, making it easy to obtain the two measurements at the same time. If the patient cannot stand, a tape measure is used to measure the patient in a supine position.

EQUIPMENT

- Scale with measuring device attached

or

- Tape measure
- Paper Towel

PROCEDURE

Functional Reading Skill
- Interprets forms and records
- Following written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Interpret charts and tables
- Collect/record data
- Interpret statistics

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Determine ability of patient to bear weight.
2. Determine ability of patient to assist in procedure.
3. Note any medical or nursing diagnoses which would alter procedure.

Planning

4. Wash hands.
5. Obtain scale or transport patient to scale **or** obtain tape measure.
6. Lock wheels of scale, if applicable.
7. Explain procedure to patient.
8. Assist ambulatory patient to remove shoes.

Implementation

9. For patient able to bear weight:
   a. Place paper towel on scale platform.
   b. Assist patient to step to scale platform, facing away from scale and with back to measuring device.

General Science Skills
- Use scientific instruments

Life Science Skills
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Investigate/apply communication process models
- Analyzing/applying non-verbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/patients

c. Raise measuring device up above patient's head.

d. Have patient stand to full height with weight evenly distributed on both feet.

e. Pull horizontal arm of measuring device down until it touches top of patient's head.

f. Record greatest number visible as reading.

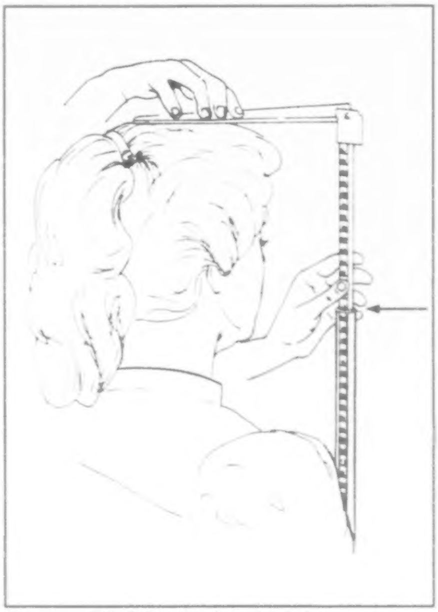

Figure **26** Measuring height

g. Assist patient from scale and assist with shoes.

10. For patient unable to bear weight:

a. Assist patient to supine position with legs fully extended and soles of feet supported upright.

b. Measure length from head to heels using tape measure.

c. Assist patient to return to comfortable position.

11. Wash hands.

Evaluation

12. Evaluate according to following criteria:
    a. Height is within expected range for age.
    b. Patient was able to cooperate in procedure.

Documentation

13. Record:
    a. According to agency policy.
    b. Any difficulty with procedure.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for: READING
WRITING
MATHEMATICS
SCIENCE
ORAL COMMUNICATION
INTERPERSONAL OR RELATING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

READING SKILLS

- Interpreting forms and records
- Following written instructions

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Interpreting charts and tables
- Collecting/recording data
- Interpreting statistics
- Making measurements

SCIENCE SKILLS

- Using scientific instrument (scale or tape)
- Investigating health issues

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

— Analyzing/applying non-verbal communication

— Communicating with clients/customers/patients

INTERPERSONAL OR RELATING SKILLS

— Investigating/applying communication process models

— Analyzing/applying non-verbal communication

— Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

— Mastering specific job task/procedure

— Applying safety practices/procedures

— Developing good work habits/attitudes

— Dealing effectively with clients/customers/patients

- If students have difficulty investigating health issues discuss with them the reasons for developing expected ranges of height and weight for certain ages.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 3 ASSESS THE PATIENT XII

OBJECTIVE 12c

Evaluate vision.

INTRODUCTION

While there are many sophisticated pieces of equipment used to test vision, the nurse may be asked to perform a simple visual screening test using the Snellen eye chart. This test may let the examiner know if further testing is required.

EQUIPMENT

- Newspaper or magazine
- Snellen eye chart

NOTE: There are several versions of the chart. One with letters for patients who can read, one with a capital "E" placed in different directions, and one with pictures for non-readers.

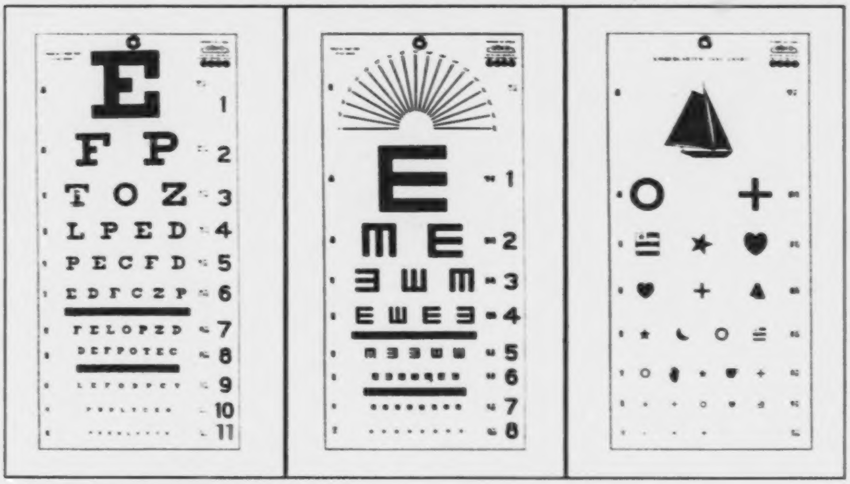

Figure **27** Sight charts*

- Card or special shield for covering one eye
- Flashlight or similar light source

PROCEDURE

Functional Reading Skill
- Interprets forms and records

Assessment and Analysis

1. Determine whether patient can read or recognize letters.
2. Determine whether patient wears corrective lenses.

NOTE: They should be worn for vision testing. Sometimes testing may be done with and without corrective lenses.

Source: Used with permission from Abco Dealers, Inc.

- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Interpret charts and tables (numerical)
- Collect/record data
- Interpret statistics

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (eye chart)

Life Science Skill
- Investigate health issues

Listening Skills
- Apply active listening skills
- Draw conclusions/make generalizations

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Communicate with clients/customers/patients

3. Determine patient's ability to cooperate in procedure.

4. Note any medical or nursing diagnoses which would alter procedure.

Planning

5. Obtain all equipment.

6. Provide adequate lighting.

7. Place appropriate eye chart on wall at patient's eye level in well-lighted area 20 feet from point where patient will be positioned for testing.

8. Explain procedure to patient.

Implementation

9. Provide patient with magazine or newspaper and ask him to read print at a distance of 14 inches from his eyes to test near vision.

10. Position patient 20 feet from eye chart.

11. Have patient cover right eye and read letters (or indicate direction of E or identify picture) on lowest line of chart he can see clearly.

12. Repeat with left eye.

13. Have patient read chart with both eyes.

14. Note visual acuity as indicated by numbers at end of line that patient reads.

    NOTE: This is expressed as a fraction with the top number being 20 indicating the patient was tested at 20 feet. The bottom number indicates the distance at which that line should be seen. 20/20 is normal vision. 20/100 means that a line visible to a person with normal vision at 100 feet is visible to a person with poorer vision at 20 feet. The higher the second number, the less visual acuity the person has.

General Relating Skills

- Analyze/apply non-verbal communication
- Communicate with clients/customers

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

15. If patient cannot read any of the eye chart (or if testing is indicated for another reason), check for functional vision:

    NOTE: Patients who cannot read eye chart, but can successfully perform these checks should be able to function. Legal blindness is considered to be vision less acute than 20/200 with corrective lenses.

    a. Shine light into patient's eyes from side and then turn off to see if presence of light is perceived.

    b. Move hands back and forth slowly one foot in front of patient's face and ask patient to identify when movement stops.

    c. Hold up some fingers one foot in front of patient's face and ask him to count number of fingers.

Evaluation

16. Evaluate according to follow criteria

    a. Patient can follow directions.

    b. Visual acuity is determined.

Documentation

17. Record:

    a. Ability to read at close range.

    b. Visual acuity (such as 20/20, 20/40) of each eye.

    c. Functional vision, if that was tested.

    d. Any difficulty in completing examination.

    e. Any other observations such as drainage, abnormal pupil reaction, sensitivity to light, redness, edema, or diminished lacrimation.

    f. Any visual complaints expressed by patient.

ASSESS THE PATIENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING
WRITING
MATHEMATICS
SCIENCE
ORAL COMMUNICATION
INTERPERSONAL OR RELATING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

READING SKILLS

- Interpreting forms and records
- Interpreting graphs and symbols
- Following written instructions

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Interpreting charts and tables
- Collecting/recording data
- Interpreting statistics
- Making measurements

SCIENCE SKILLS

- Using scientific instrument (Snellen eye chart)

- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Drawing conclusions/making generalizations
- Giving/following oral directions
- Applying questioning techniques
- Communicating with clients/customers/patients
- Analyzing/applying non-verbal communication

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty interpreting graphs and symbols, review the symbols and use of a graph.
- If students have difficulty using the Snellen eye chart, review the correct procedure for its use.
- If students have difficulty investigating health issues:
  - Discuss the symptoms of eye diseases.
  - Discuss the importance of proper testing in maintaining healthy eyes and good vision.
- If students have difficulty drawing conclusions and making generalizations
  - Suggest that they examine the results of each area of the vision test and repeat any section in which the results are unclear to them.

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- Urge them to organize their thoughts before directions are begun.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 4

ASSESS THE PATIENT

XII

OBJECTIVE 12d

Evaluate hearing.

INTRODUCTION

The nurse may do some very simple hearing testing as screening to determine the need for more extensive testing. Observation of the patient's response to the spoken word is an important form of screening.

The tuning fork is used to evaluate hearing by bone conduction and to compare it with the ability to hear sound transmitted through air. This type of testing aids in determining the type of hearing loss, if hearing is impaired.

EQUIPMENT

- Ticking watch
- Tuning fork

PROCEDURE

Functional Reading Skills
- Following written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Oral Presentation Skills
- Use good speaking techniques

Assessment and Analysis

1. Note patient's ability to respond to and follow instructions.

   NOTE: This may indicate that instructions are not heard.

2. Determine whether patient takes or has taken any medication, such as aspirin or some antibiotics, which could cause hearing damage.

3. Determine whether patient has been subjected to loud noises over a period of time, such as in the workplace.

4. Determine if there has been a history of ear infections.

5. Note patient's age.

   NOTE: Hearing tends to become less acute with age, but do not insult all older people by talking loudly just because of their age.

6. Assess individual's speech patterns.

   NOTE: Talking loudly, speaking in a monotone, or mispronouncing words may indicate difficulty in hearing.

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Develop good work habits/attitudes

Planning

7. Provide a quiet environment for testing.

8. Explain procedure to patient.

Implementation

9. Have patient occlude one ear with finger and close eyes.

10. Stand one foot from patient.

11. Whisper several numbers in random sequence.

12. Have patient repeat numbers.

13. Repeat, whispering louder until patient can identify half of the numbers.

14. Hold ticking watch 1-2 inches from unoccluded ear.

15. Have patient indicate if ticking is heard.

    NOTE: The ticking represents a higher frequency than the human voice.

16. Repeat process for other ear.

17. Hold the tuning fork at the base and activate by striking against palm of opposite hand.

18. Place base of vibrating fork against top of patient's head and ask patient to identify where sound is heard.

    NOTE: This is called Weber's test. Normally, the patient will identify the sound as being heard equally in both ears or at the top of the head.

19. Hold the tuning fork at the base and activate by striking against palm of opposite hand.

20. Place the base of the vibrating fork against the mastoid bone until the patient no longer hears sound.

21. Immediately place the prongs near the ear and ask the patient if sound is still audible.

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22. Repeat for other ear.

NOTE: This is called Rinne's test. Sound is normally heard longer through air than by bone conduction.

Evaluate

23. Evaluate using following criteria.
    a. Patient was able to follow directions for screening.
    b. Patient was able to identify numbers and sound of ticking.
    c. Patient was able to identify sound as equal in both ears for Weber's test.
    d. Patient was able to hear sound through air after no longer hearing sound by bone conduction for Rinne's test.

Documentation

24. Record:
    a. Accuracy of patient in reporting sounds in each ear.
    b. Ability of patient to hear sounds by bone conduction and through air.
    c. Any difficulty in conducting screening.
    d. Any difficulty reported by patient.

ASSESS THE PATIENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for:
READING
WRITING
SCIENCE
ORAL COMMUNICATION
INTERPERSONAL OR RELATING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

  READING SKILLS

  — Following written instructions

  WRITING SKILLS

  — Completing forms and records

  SCIENCE SKILLS

  — Investigating health issues

  — Investigating/applying principles of anatomy/physiology

  ORAL COMMUNICATION SKILLS

  — Using good speaking technique

  — Applying active listening skills

  — Giving/following oral directions

  — Applying questioning techniques

  — Communicating with clients/customers/patients

INTERPERSONAL OR RELATING SKILLS

— Analyzing/applying non-verbal communication

— Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

— Mastering specific job task/procedure

— Developing good work habits/attitudes

- If students have difficulty investigating health issues:
  - — Discuss the symptoms of various hearing problems.
  - — Discuss the importance of proper testing in maintaining good hearing.
- If students have difficulty investigating/applying principles of anatomy/physiology, refer them to the appropriate units in their *Body Structure and Function* test, i.e. Skeletal System.
- If students have difficulty using good speaking techniques:
  - — Suggest that they record their voices and give oral instructions to ascertain where improvement could be made.
  - — Have them work in teams and critique the speaking techniques.
  - — Remind them to be aware of the non-verbal signals that are used to indicate the listener is uncomfortable with the volume of the voice.

    EXAMPLE: A patient may turn one ear toward the speaker, cock his head to the side, or cup his ear if the volume of the voice is too low.
- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 5 — ASSESS THE PATIENT — XII

OBJECTIVE 12e

Perform blood glucose monitoring.

INTRODUCTION

Many people have to have blood glucose monitored at regular intervals. The nurse may perform this testing and also teach the patient to do it. Various devices are available to electronically perform this monitoring, so specific instructions must be followed. General principles of infection control will remain the same.

EQUIPMENT

- Glucose testing meter
- Blood glucose reagent strips

  NOTE: Specific strips are required for each testing meter. Check manufacturer's instructions for correct strips.

- Antiseptic swab
- Dry cotton ball or tissue, if required by testing meter
- Sterile lancet or blood-letting device
- Paper towel
- Gloves

PROCEDURE

Reading Comprehension Skills
- Gain factual information

Functional Reading Skill
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Determine patient's ability to cooperate in procedure.
2. Assess possible sites for skin puncture.

   NOTE: The fingers are usually used for adults. Toes or heels may also be used, especially for infants.

3. Note any medical or nursing diagnoses which would alter procedure.

Planning

4. Read manufacturer's instructions for specific testing meter being used.
5. Wash hands.
6. Obtain all equipment.
7. Explain procedure to patient.

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Interpret charts and tables (numerical)
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (testing meter)
- Collect specimens

Life Science Skill
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers

General Relating Skills
- Interact with clients/customers

Cognitive Activities Skills
- Collect/record information
- Analyze/synthesize information
- Draw conclusion

8. Perform any preliminary checks recommended by manufacturer or required by agency.

Implementation

9. Remove blood glucose reagent strip from container and immediately replace cap on container.

10. Lay on paper towel in dry area with test pad up
or
place directly in meter for models with that provision.

11. Put on gloves.

12. Wipe site chosen for puncture with antiseptic swab or have patient wash hands thoroughly.

    NOTE: Frequent use of alcohol can toughen skin and be expensive for the patient who performs his own testing.

13. Puncture site with sterile lancet or blood-letting device with one quick, smooth motion.

14. Wipe away first drop of blood.

15. Gently squeeze puncture site until large drop of blood has formed.

16. Place drop of blood on test pad of reagent strip.

17. Follow testing meter directions concerning blotting strip, placing into meter, and setting timing device on meter.

18. Apply pressure to puncture site with antiseptic swab or dry cotton ball.

19. Note reading when displayed on meter.

    NOTE: Containers of reagent strips have color charts for determining blood glucose without a meter. While the meters are generally preferred methods of assessment, the color charts can be used as additional verification of the reading.

20. Dispose of reagent strip, swabs, and lancet appropriately.

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients

21. Remove gloves without contaminating self.

22. Wash hands.

23. Make patient comfortable.

24. Place call light within easy reach.

25. Return all equipment to correct location.

Evaluation

26. Evaluate according to following criteria:

    a. Blood glucose was within normal limits.

    NOTE: Each facility will have normal values established for blood glucose. Depending on when the person has last eaten, normal values can be expected to fall between 60-140 mg.

    b. Testing was performed without difficulty.

Documentation

27. Record:

    a. Blood glucose level according to agency policy.

    b. Any difficulty in obtaining blood sample.

    c. Any difficulty in stopping blood flow.

    d. Any action taken with regard to blood glucose level.

    NOTE: This could include insulin administration or notifying physician.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Skill development for:
READING
WRITING
MATHEMATICS
SCIENCE
ORAL COMMUNICATION
INTERPERSONAL OR RELATING
CREATIVE THINKING AND PROBLEM SOLVING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, creative thinking and problem solving, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

READING SKILLS

— Gain factual information

— Interpreting forms and records

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Interpreting charts and tables

— Collecting and recording data

— Making measurements

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SCIENCE SKILLS

- Using scientific instrument (testing meter)
- Collecting specimens
- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions
- Communicating with clients/customers/patients

CREATIVE THINKING AND PROBLEM SOLVING

- Collecting/recording information
- Analyzing/synthesizing information
- Drawing conclusions

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty collecting specimens/samples:
  - Review procedure for collecting sample.
  - Explain that this procedure sometimes makes new students nervous, but it is an easy, essential procedure that becomes routine with practice.
  - Allow students to practice drawing samples from their own fingers or those of a partner, if facility rules permit.

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  - Review information in the text concerning the circulatory system.

- If students have difficulty investigating health issues:
  - Discuss the use of insulin.
  - Discuss the many ways in which information obtained from a blood sample may be used.

- If students have difficulty analyzing/synthesizing information, have them review the data and identify those facts that may signal a problem.

- If students have difficulty drawing conclusions, direct the student to review both the collected data and the standard procedures before drawing a conclusion.

- If students have difficulty mastering a specific job task/procedure, suggest they study each component of the procedure to determine which area is causing difficulty. Review and practice skills for that area.

  EXAMPLE: A student who is proficient in analyzing the information from the blood test but is hesitant about drawing the blood sample should review the procedure for drawing blood and practice until s/he is more comfortable with the procedure.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheets 1 and 2.

JOB SHEET 6

ASSESS THE PATIENT

XII

OBJECTIVE 12f

Assist with a physical examination.

INTRODUCTION

Physical examinations vary with the examiner and the needs of the patient. The nurse needs to make the experience as smooth and comfortable as possible for the patient. Thinking ahead to anticipate the needs of the patient and examiner will help make this possible.

Most examinations occur in a head-to-toe order, but there may be reason to vary the order. Generally, the parts of the examination that may be painful or more uncomfortable are reserved for the final portion of the examination.

EQUIPMENT

- Examination gown
- Sheet or other draping material
- Disposable underpad
- Tongue depressor
- Otoscope
- Ophthalmoscope
- Flashlight or similar light source
- Percussion hammer
- Vaginal speculum
- Lubricant
- Gloves
- Tissues
- Material for collection of specimens as indicated:
    - — Cotton-tipped swabs
    - — Wooden spatula
    - — Slides for Papanicolaou smear
    - — Spray fixative for collection of Papanicolaou smear
    - — Culture plates
    - — Specimen containers
    - — Requisitions for ordering tests
- Trash receptacle

NOTE: Additional equipment may be used or some items may be eliminated depending upon the situation.

PROCEDURE

Assessment and Analysis

1. Determine what specific examinations the examiner will perform.

Functional Reading Skill
- Interpret forms and records
- Interpret graphs and symbols (charts)
- Use content area vocabulary
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Operation and Calculation Skills
- Calculate with metric measures

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Interpret charts and tables (numerical)
- Collect/record data

Functional Math Skills
- Make measurements

General Science Skills
- Apply scientific method of inquiry
- Use scientific instruments (scales, tapes)
- Collect specimens

Life Science Skill
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

2. Determine what specimens are likely to be collected.

3. Determine patient's understanding of the procedure.

4. Determine patient's ability to cooperate.

5. Note any medical or nursing diagnoses which will alter procedure.

Planning

6. Wash hands.

7. Gather all equipment.

8. Check equipment for proper function.

    NOTE: Be certain that items requiring batteries have them and items which are stored in recharging units are fully charged.

9. Provide for adequate lighting in examination room.

10. Give patient opportunity to void before examination.

    NOTE: An empty bladder will make the patient more comfortable. If a urine specimen must be collected, provide appropriate receptacle and instructions or collect it yourself.

11. Explain procedure to patient and ask if patient has any questions about procedure.

Implementation

12. Complete any preliminary screening such as:

    — vital signs
    — weight
    — measurement of height
    — vision testing
    — hearing testing
    — finger stick for blood sample
    — completion of history as desired by examiner

13. Assist patient into examination gown or give patient instructions to complete task if assistance is not required.

Listening Skills
- Apply active listening skills
- Draw conclusions/ make generalizations

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/ patients
- Communicate with professional colleagues/ associates

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers/ patients
- Interact with professional colleagues/ associates

Teamwork/Cooperative Skills
- Identify needs/ drives
- Select/apply appropriate behavior

Leadership/Influencing Skills
- Obtain confidence of others
- Provide positive coaching
- Collect/record information

14. Assist patient into sitting position for beginning of exam, if not contraindicated.

    NOTE: The supine position may be used if patient cannot sit upright.

15. Provide examiner with materials to examine head and neck including.

    a. Light source
    b. Tongue depressor
    c. Ophthalmoscope
    d. Otoscope
    e. Sterile cotton swabs, culture media, if throat culture is desired

    NOTE: The otoscope and ophthalmoscope may be a single instrument with interchangeable heads. Provide the correct size speculum for the otoscope.

16. Provide examiner with stethoscope for auscultating heart and lungs in chest examination.

17. Assist with untying gown or removing drape to expose portion of chest being examined.

18. Assist patient to supine position for examination of abdomen and female breast.

19. Reposition gown and drape to expose only part being examined.

20. Assist female patient with moving arms above head for breast examination.

21. For female genitalia and rectum:

    a. Assist to dorsal recumbent position if examination is carried out in bed and lithotomy position if examination is carried out on examination table with stirrups.

Cognitive Activities Skills
- Analyze/synthesize information
- Draw conclusions

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with professional colleagues/ associates
- Deal effectively with customers/clients

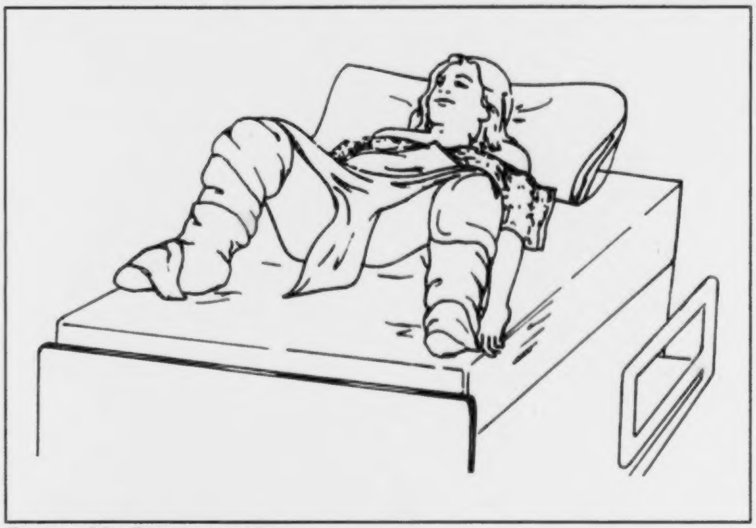

Figure **28** Draped patient

b. Drape patient by placing drape with corner under chin and opposite corner between legs.

c. Wrap remaining corners around feet creating a kind of boot.

NOTE: Corner between legs can be turned back when examination begins. Do not place patient in this position until examination is ready to begin since it is not a comfortable position to maintain.

d. Provide examiner with gloves.

e. Provide vaginal speculum that has been warmed under running warm water.

f. Adjust light so examiner can visualize interior structures.

g. Encourage patient to breathe slowly and deeply to aid in relaxation throughout examination.

h. Provide cotton-tipped swab and wooden spatula for collection of Pap smear.

i. Have slides ready for examiner to spread collected material.

j. Mark slides appropriately or use pre-marked slides to indicate collection sites as endocervical (E), cervical (C) and vaginal (V).

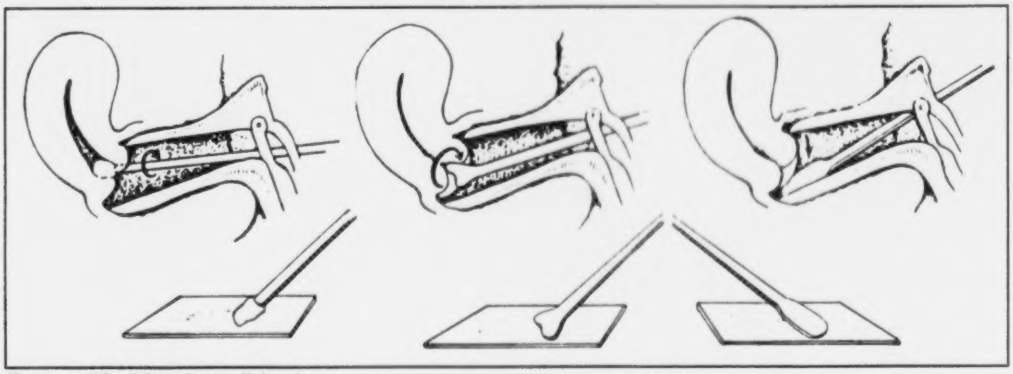

Figure **29** Marking slides*

k. Spray fixative on slides to set collected material.

l. Provide generous amount of lubricant on finger of examiner for rectal examination.

m. Provide tissue for examiner to remove excess lubricant from anal area.

n. Assist patient out of dorsal recumbent or lithotomy position.

22. For examination of male genitalia and rectum:

    a. With patient in supine position, expose genital area.

    b. Provide gloves for examiner.

    c. Assist patient to Sim's position or to standing position leaning forward across examination table for rectal examination.

    d. Adjust drape to expose anal area.

---

* Source: Potter, Patricia A., and Perry, Anne G.; *Clinical Nursing Skills and Techniques*, St. Louis. ©1986, The C.V. Mosby Company. Used with permission.

   e. Provide generous amount of lubricant to examiner's finger.

   f. Encourage patient to breathe slowly and deeply to aid in relaxation during examination.

   g. Provide examiner with tissue to remove excess lubricant from rectal area.

   h. Assist patient to sitting or supine position.

23. Assist examiner in completing examination of nervous and musculoskeletal systems as indicated.

    NOTE: This could involve testing reflexes with a percussion hammer or requiring patient to respond to stimuli such as pin pricks or wisps of cotton. The patient may be asked to move various joints, walk, bend, and stand straight.

24. Throughout examination, encourage patient and observe patient for indications of pain or adverse reactions to examination.

25. Assist patient to dress, or rearrange gown and bedding.

26. Answer any questions patient has and provide any instructions patient needs.

27. Complete all laboratory requisitions, label specimen containers, and send to lab.

28. Dispose of all disposable equipment and clean reusable equipment in appropriate manner.

    NOTE: Some may require sterilization.

29. Clean surfaces of examining table or replace with fresh coverings.

30. Wash hands.

Evaluation

31. Evaluate according to following criteria:
    a. Examination was completed with a minimum of discomfort to patient.
    b. Patient was not unnecessarily exposed.
    c. Safety of patient was not compromised.
    d. All equipment was ready and functioning when needed.
    e. All specimens were collected and sent to appropriate area.
    f. Equipment was discarded or cleaned.
    g. Examination area was clean.

Documentation

32. Record:
    a. All assessment data obtained prior to examination.
    b. Reactions of patient to examination.
    c. All specimens collected.
    d. Instructions given to patient.

ASSESS THE PATIENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Skill development for:
READING
WRITING
MATHEMATICS
SCIENCE
ORAL COMMUNICATION
INTERPERSONAL OR RELATING
CREATIVE THINKING AND PROBLEM SOLVING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, creative thinking and problem solving, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

READING SKILLS

- Interpreting forms and records
- Interpreting graphs and symbols
- Using content area vocabulary
- Following written instructions

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Calculating with metric measures
- Using English and metric measures
- Interpreting charts and tables
- Collecting and recording data
- Making measurements

SCIENCE SKILLS

- Applying scientific instruments (scales, tapes)
- Using scientific instrument (scales, tapes)
- Collecting specimens/samples
- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Drawing conclusions/making generalizations
- Giving/following oral directions
- Applying questioning techniques
- Communicating with clients/customers/patients
- Communicating with professional colleagues/associates

INTERPERSONAL OR RELATING

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Interacting with professional colleagues/associates
- Identifying needs/drives
- Selecting/applying appropriate behavior
- Obtaining confidence of others
- Providing positive coaching

CREATIVE THINKING AND PROBLEM SOLVING

- Collecting/recording information

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- Analyzing/synthesizing information
- Drawing conclusions

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with professional colleague/associate
- Dealing effectively with clients/customers/patients

- If students have difficulty using scale or tape, review the correct procedure for their use.
- If students have difficulty investigating health issues, discuss the importance of and aspects of a physical examination.
- If students have difficulty communicating with professional colleagues/associates:
  - Review oral communication skills.
  - Stress the importance of learning medical terminology.
- If students have difficulty interacting with professional colleagues/associates, discuss appropriate professional behavior.
- If students have difficulty identifying needs/drives:
  - Tell them to review the procedure and plan what assistance will probably be needed.
  - Have them consult with colleagues to ascertain what assistance is needed.
- If students have difficulty selecting/applying appropriate behavior, discuss what constitutes professional behavior.

- If students have difficulty obtaining confidence of others, suggest that they:
    - Review communication and relating skills.
    - Review appropriate behavior.
    - Spend more time reviewing their role in any procedure.
    - Review the proper appearance for a professional.
    - Discuss with a trusted professional the possible reasons for the lack of confidence.
- If students have difficulty providing positive coaching:
    - Review the assistant's role in coaching the patient.
    - Review oral communication skills.
    - Discuss the need for the student to maintain a positive, confident attitude.
- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheets 1 and 2.

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JOB SHEET 7

ASSESS THE PATIENT

XII

OBJECTIVE 12g

Perform an initial physical assessment.

INTRODUCTION

The head-to-toe assessment described in this job sheet is appropriate for an initial assessment at the beginning of the shift. It is the assessment of a nurse generalist. A nurse in a specialty area would adapt it to include more data in that specialty area and perhaps delete other data not so important to those patients.

The experienced practitioner will learn to combine parts of the assessment to obtain several pieces of information at one time. With practice, it will take just a few minutes to complete the assessment.

EQUIPMENT

- Stethoscope
- Sphygmomanometer
- Thermometer
- Watch with second hand
- Penlight
- Draping material

NOTE: If patient is in hospital bed, top covers should be sufficient.

PROCEDURE

Functional Reading Skill
- Interpret forms and records
- Use content area vocabulary
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Ask if the patient has any particular problems or complaints.
2. Check for medical or nursing diagnoses which would alter procedure.

Planning

3. Wash hands.
4. Gather all equipment.
5. Provide privacy.
6. Explain procedure to patient.
7. Raise bed to comfortable working height.

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Collect/record data
- Interpret statistics

Functional Math Skills
- Make measurements

General Science Skills
- Apply scientific method of inquiry
- Use scientific instruments (sphygmomanometer thermometer, watch)

Life Science Skill
- Investigate/apply principles of anatomy/physiology
- Investigate health issues

Listening Skills
- Apply active listening skills
- Draw conclusions/ make generalizations

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers

General Relating Skills
- Analyze/apply non-verbal communication

8. Apply draping material, if applicable.

Implementation

9. Assess general mental status:
   a. Address patient in normal tone of voice.
      1) If there is no response, raise voice.
      2) If there is no response, hold shoulder and shake gently.
      3) If there is still no response, press thumb firmly against base of fingernail or over sternum.
   b. Assess appropriateness of verbal response.
      1) Ask questions demanding more than a "yes" or "no" response.
      2) Assess orientation by having patient identify self or others present (person), location (place) and day, month, or year (time).
10. Use penlight to assess pupil reaction and color of conjunctiva.
11. Inspect visible skin and mucous membranes observing color.
12. Palpate skin to assess skin temperature and moisture on surface of skin.
13. Obtain vital signs.
14. Auscultate apical pulse, noting especially rhythm and volume.
15. Auscultate breath sounds, listening over anterior, posterior, and lateral surfaces down the length of the chest cavity.

- Interact with clients/customers/patients

Leadership/Influencing Skills
- Obtain confidence of others
- Provide positive coaching

Cognitive Activities Skills
- Collect/record information
- Analyze/synthesize information
- Draw conclusion

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Develop self-confidence/esteem
- Deal effectively with customers/clients/patients

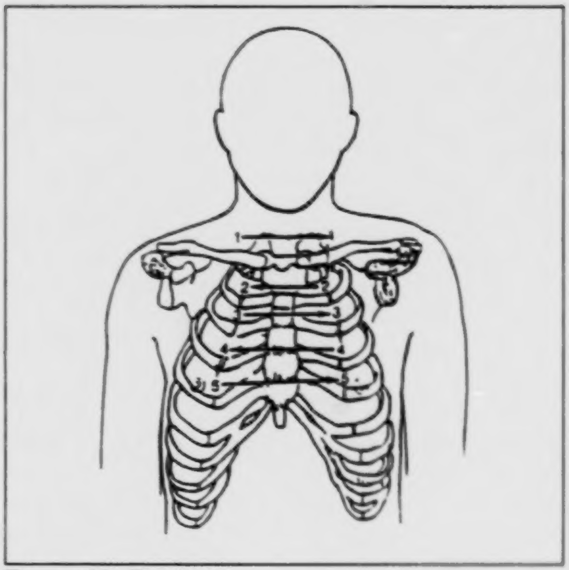

Figure **30** Positions

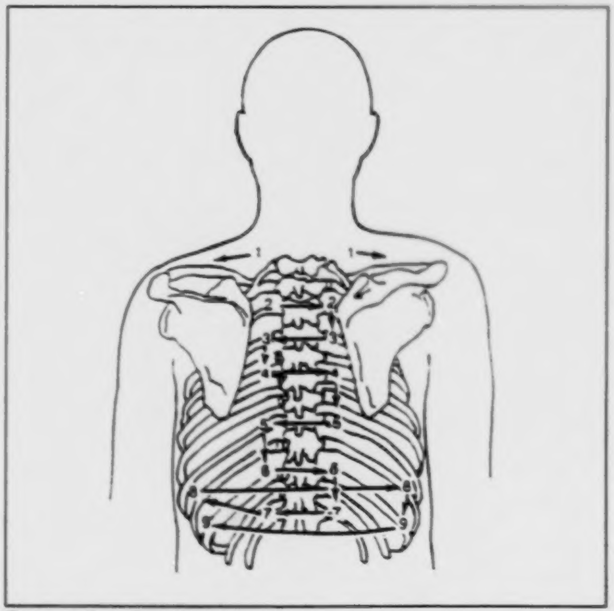

Figure **31** Positions

NOTE: If possible, the patient should be in a sitting position. Otherwise, the patient will have to be turned to the side for the posterior chest.

16. Inspect chest for respiratory movements, shape, and symmetry.

17. Auscultate bowel sounds in each quadrant.

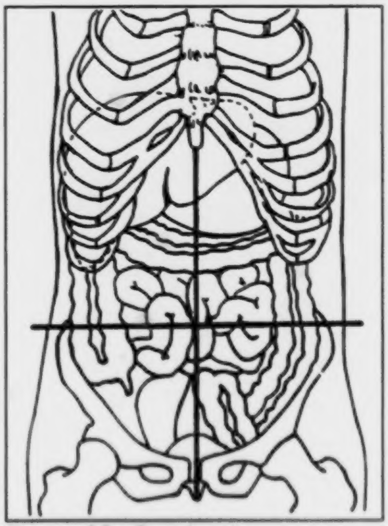

Figure **32** Quadrants

18. Inspect abdomen for distention, scars, suture lines, or dressings.

19. Palpate abdomen lightly over all quadrants to detect distention or tenderness.

20. Inspect perineal area for signs of drainage from urinary meatus or female vagina.

21. Hold out index fingers and ask patient to grasp them, noting equality of grasp.

22. Inspect hands for presence of edema.

23. Assess for skin turgor and capillary refill.

24. Observe range of motion in upper extremities.

25. Have patient move legs or press feet against examiner's palms, noting equality of movement and strength.

26. Inspect skin color of lower extremities.

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27. Inspect ankles and feet for signs of edema.

28. Assess capillary refill of lower extremities.

29. Palpate pedal pulses.

30. Try to elicit Homan's sign by pressing toes backward in plantar flexion.

    NOTE: The sign is positive if the procedure is painful. This may indicate deep vein thrombosis.

31. Observe range of motion in lower extremities.

32. Observe all equipment attached to patient to determine that it is intact and functioning properly.

33. Check all equipment present for emergency use to determine that it is functioning properly.

34. Include any additional assessments relative to the patient's condition.

35. Make patient comfortable.

36. Return bed to lowest level and raise side rails.

37. Make sure call light is within easy reach.

38. Wash hands.

Evaluation

39. Evaluate according to following criteria:

    a. All pertinent factors were assessed.

    b. Appropriate assessment techniques were used.

    c. Patient did not experience unnecessary discomfort during assessment.

    d. Patient was not unnecessarily exposed during assessment.

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e. Safety of patient was not compromised during assessment.

Documentation

40. Record all findings according to agency policy.

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ASSESS THE PATIENT

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 7

Skill development for:
READING
WRITING
MATHEMATICS
SCIENCE
ORAL COMMUNICATION
INTERPERSONAL OR RELATING
CREATIVE THINKING AND PROBLEM SOLVING
EMPLOYABILITY

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, creative thinking and problem solving, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

READING SKILLS

— Interpreting forms and records

— Using content area vocabulary

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Collecting and recording data

— Interpreting statistics

— Making measurements

SCIENCE SKILLS

— Applying scientific method of inquiry

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- Using scientific instrument (sphygmomanometer, thermometer, watch)
- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Drawing conclusions/making generalizations
- Giving/following oral directions
- Applying questioning techniques
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL OR RELATING

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Obtaining confidence of others
- Providing positive coaching

CREATIVE THINKING AND PROBLEM SOLVING

- Collecting/recording information
- Analyzing/synthesizing information
- Drawing conclusions

EMPLOYABILITY SKILLS

- Mastering specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes

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  - Developing self-confidence/esteem
  - Dealing effectively with clients/customers/patients
- If students have difficulty applying scientific method of inquiry:
  - Explain the importance of having verifiable facts to consider.
  - Discuss the reasons for performing more than one test, repeating a test, or getting a second opinion.
- If students have difficulty using scientific instruments (sphygmomanometer, thermometer, watch) review the correct procedure for the use of each instrument.
- If students have difficulty applying active listening skills, practice listening and then repeating the information.

EXAMPLE: Patient: "I couldn't sleep at all last night."
Student: "I'm sorry you didn't sleep well."

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheets 1, 2, 5, and 6.

ASSESS THE PATIENT

JOB SHEET 1

Weigh a patient.

STUDENT'S NAME ________________ DATE ________

EVALUATOR'S NAME ________________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted age of patient.	____	____
2. Determined ability of patient to bear weight.	____	____
3. Determined ability of patient to assist in procedure.	____	____
4. Noted any medical or nursing diagnoses which would alter procedure.	____	____
5. Enlisted help as needed.	____	____
6. Washed hands.	____	____
7. Obtained correct scale or transported patient to scale.	____	____
8. Locked wheels of scale, if applicable.	____	____
9. Explained procedure to patient.	____	____

	YES	NO
10. Assisted patient in removing clothing and shoes as needed.	____	____
11. Ensured that scale was calibrated or balanced as needed.	____	____
12. For standing balance scale:		
a. Placed paper towel on platform to prevent bare feet from contacting scale.	____	____
b. Assisted patient to step onto scale.	____	____
c. Moved large slide on bottom balance arm to the right at estimated position.	____	____
d. Moved the smaller slide on top balance arm to right until arm was balanced at midpoint.	____	____
e. Added numbers where weights were resting on bottom and top balance arms to determine weight.	____	____
13. For bed scale:		
a. Cleaned scale platform with disinfectant solution and/or placed sheet over platform.	____	____
b. Balanced scale with sheet in place as necessary.	____	____
c. Placed patient on sheet for lifting to scale platform or on stretcher-type platform itself which had been disconnected from rest of scale.	____	____

		YES	NO
	d. Moved patient to platform or connected stretcher-type platform to rest of scale.	____	____
	e. Moved scale platform so that it was free of the bed.	____	____
	f. Added weights to determine patient's weight or read digital display.	____	____
14.	For chair scale:		
	a. Assisted patient to sit in chair.	____	____
	b. Added weights to determine patient's weight or read digital display.	____	____
15.	For infant scale:		
	a. Placed disposable pad on scale platform.	____	____
	b. Balanced scales.	____	____
	c. Placed infant on scale platform.	____	____
	d. Added weights to determine patient's weight or read digital display.	____	____
16.	Assisted patient from scale as necessary.	____	____
17.	Assisted patient to dress as needed.	____	____
18.	Disinfected scale platform and/or disposed of material used to cover scale platform in appropriate manner.	____	____
19.	Evaluated according to established criteria.	____	____
20.	Documented appropriately.	____	____

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment correctly	4	3	2	1
Obtained correct weight	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 2

ASSESS THE PATIENT

XII

JOB SHEET 2

Measure a patient's height/length.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined ability of patient to bear weight.	____	____
2. Determined ability of patient to assist in procedure.	____	____
3. Noted any medical or nursing diagnosis which would alter procedure.	____	____
4. Washed hands.	____	____
5. Obtained scale or transported patient to scale **or** obtained tape measure.	____	____
6. Locked wheels of scale, if applicable.	____	____
7. Explained procedure to patient.	____	____
8. Assisted ambulatory patient to remove shoes.	____	____

	YES	NO
9. For patient able to bear weight:		
a. Placed paper towel on scale.	____	____
b. Assisted patient to step to scale platform, facing away from scale and with back to measuring device.	____	____
c. Raised measuring device up above patient's head.	____	____
d. Had patient stand to full height with weight evenly distributed on both feet.	____	____
e. Pulled horizontal arm of measuring device down until it touched top of patient's head.	____	____
f. Recorded greatest number visible as reading.	____	____
g. Assisted patient from scale and assisted with shoes.	____	____
10. For patient unable to bear weight:		
a. Assisted patient to supine position with legs fully extended and soles of feet supported upright.	____	____
b. Measured length from head to heels, using tape measure.	____	____
c. Assisted patient to return to comfortable position.	____	____
11. Washed hands.	____	____
12. Evaluated according to established criteria.	____	____
13. Documented appropriately.	____	____

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EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment correctly	4	3	2	1
Obtained correct height/length	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1680

PRACTICAL TEST 3

ASSESS THE PATIENT

XII

JOB SHEET 3

Evaluate vision.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined whether patient could read or recognize letters.	_____	_____
2. Determined whether patient wore corrective lenses.	_____	_____
3. Determined patient's ability to cooperate in procedure.	_____	_____
4. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
5. Obtained all equipment.	_____	_____
6. Provided adequate lighting.	_____	_____
7. Placed appropriate eye chart on wall at patient's eye level in well-lighted area 20 feet from point where patient would be positioned for testing.	_____	_____
8. Explained procedure to patient.	_____	_____

		YES	NO
9.	Provided patient with magazine or newspaper and asked him to read print at a distance of 14 inches from his eyes to test near vision.	_____	_____
10.	Positioned patient 20 feet from eye chart.	_____	_____
11.	Had patient cover right eye and read letters (or indicate direction of E or identify picture) on lowest line of chart he could see clearly.	_____	_____
12.	Repeated with left eye.	_____	_____
13.	Had patient read chart with both eyes.	_____	_____
14.	Noted visual activity as indicated by numbers at end of line that patient read.	_____	_____
15.	If patient could not read any of eye chart (or if testing was indicated for another reason), checked for functional vision:	_____	_____
	a. Shined light into patient's eyes from side and then turned off to see if light was perceived.	_____	_____
	b. Moved hands back and forth slowly one foot in front of patient's face and asked patient to identify when movement stopped.	_____	_____
	c. Held up some fingers one foot in front of patient's face and asked him to count number of fingers.	_____	_____

	YES	NO
16. Evaluated according to established criteria.	____	____
17. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ________________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Positioned patient at appropriate distance from eye chart	4	3	2	1
Used correct techniques for evaluating functional vision	4	3	2	1
Obtained accurate evaluation	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1685

JOB SHEET 4

Evaluate hearing.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Noted patient's ability to respond to and follow instructions.	_____	_____
2. Determined whether patient took or had taken medication such as aspirin or some antibiotics which could cause hearing damage.	_____	_____
3. Determined whether patient had been subjected to loud noises over a period of time, such as in the workplace.	_____	_____
4. Determined if there had been a history of ear infections.	_____	_____
5. Noted patient's age.	_____	_____
6. Assessed individual's speech patterns.	_____	_____
7. Provided a quiet environment for testing.	_____	_____
8. Explained procedure to patient.	_____	_____

	YES	NO
9. Had patient occlude one ear with finger and close eyes.	____	____
10. Stood one foot from patient.	____	____
11. Whispered several numbers in random sequence.	____	____
12. Had patient repeat numbers.	____	____
13. Repeated, whispering louder until patient could identify half of the numbers.	____	____
14. Held ticking watch 1-2 inches from unoccluded ear.	____	____
15. Had patient indicate if ticking was heard.	____	____
16. Repeated process for other ear.	____	____
17. Held the tuning fork at the base and activated by striking against palm of opposite hand.	____	____
18. Placed base of vibrating fork against top of patient's head and asked patient to identify where sound was heard.	____	____
19. Held the tuning fork at the base and activate by striking against palm of opposite hand.	____	____
20. Placed the base of the vibrating fork against the mastoid bone until the patient no longer heard sound.	____	____
21. Immediately placed the prongs near the ear and asked the patient if sound was still audible.	____	____
22. Repeated for other ear.	____	____

1687

	YES	NO
23. Evaluated using established criteria.	____	____
24. Documented appropriately.	____	____

EVALUATOR'S COMMENTS

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment correctly	4	3	2	1
Evaluated hearing correctly	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1689

PRACTICAL TEST 5

ASSESS THE PATIENT

JOB SHEET 5

Perform blood glucose monitoring.

STUDENT'S NAME ____________ DATE ________

EVALUATOR'S NAME ____________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined patient's ability to cooperate in procedure.	____	____
2. Assessed possible sites for skin puncture.	____	____
3. Noted any medical or nursing diagnoses which would alter procedure.	____	____
4. Read manufacturer's instructions for specific testing meter being used.	____	____
5. Washed hands.	____	____
6. Obtained all equipment.	____	____
7. Explained procedure to patient.	____	____
8. Performed any preliminary checks recommended by manufacturer or required by agency.	____	____
9. Removed blood glucose reagent strip from container and immediately replaced cap on container.	____	____

1690

	YES	NO
10. Laid on paper towel in dry area with test pad up. **or** placed directly in meter for models with that provision.	_____	_____
11. Put on gloves.	_____	_____
12. Wiped site chosen for puncture with antiseptic swab or had patient wash hands thoroughly.	_____	_____
13. Punctured site with sterile lancet or blood-letting device with one quick, smooth motion.	_____	_____
14. Wiped away first drop of blood.	_____	_____
15. Gently squeezed puncture site until large drop of blood formed.	_____	_____
16. Placed drop of blood on test pad of reagent strip.	_____	_____
17. Followed testing meter directions concerning blotting strip, placing into meter, and setting timing device on meter.	_____	_____
18. Applied pressure to puncture site with antiseptic swab or dry cotton ball.	_____	_____
19. Noted reading when displayed on meter.	_____	_____
20. Disposed of reagent strip, swabs, and lancet appropriately.	_____	_____
21. Removed gloves without contaminating self.	_____	_____
22. Washed hands.	_____	_____
23. Made patient comfortable.	_____	_____

	YES	NO
24. Placed call light within easy reach.	____	____
25. Returned all equipment to correct location.	____	____
26. Evaluated using established criteria.	____	____
27. Documented appropriately.	____	____

EVALUATOR'S COMMENTS

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment correctly	4	3	2	1
Performed procedure correctly in organized manner	4	3	2	1
Obtained results	4	3	2	1
Performed visual verification	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1693

PRACTICAL TEST 6

ASSESS THE PATIENT

XII

JOB SHEET 6

Assist with a physical examination.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Determined what specific examinations the examiner was to perform.	_____	_____
2. Determined what specimens were likely to be collected.	_____	_____
3. Determined patient's understanding of the procedure.	_____	_____
4. Determined patient's ability to cooperate.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered all equipment.	_____	_____
8. Checked equipment for proper function.	_____	_____
9. Provided for adequate lighting in examination room.	_____	_____

	YES	NO
10. Gave patient opportunity to void before examination.	____	____
11. Explained procedure to patient and asked if patient had any questions about procedure.	____	____
12. Completed preliminary screening.	____	____
13. Assisted patient into examination gown or gave patient instructions to complete task if assistance was not required.	____	____
14. Assisted patient into sitting position for beginning of exam, if not contraindicated.	____	____
15. Provided examiner with materials to examine head and neck.	____	____
16. Provided examiner with stethoscope.	____	____
17. Assisted with untying gown or removing drape to expose portion of chest being examined.	____	____
18. Assisted patient to supine position for examination of abdomen and female breast.	____	____
19. Repositioned gown and draped to expose only part being examined.	____	____
20. Assisted female patient with moving arms above head for breast examination.	____	____

	YES	NO
21. For female genitalia and rectum:		
a. Assisted to dorsal recumbent position if examination was carried out in bed and lithotomy position if examination was carried out on examination table with stirrups.	_____	_____
b. Draped patient by placing drape with corner under chin and opposite corner between legs.	_____	_____
c. Wrapped remaining corners around feet.	_____	_____
d. Provided examiner with gloves.	_____	_____
e. Provided vaginal speculum that had been warmed under running warm water.	_____	_____
f. Adjusted light so examiner could visualize interior structures.	_____	_____
g. Encouraged patient to breathe slowly and deeply to aid in relaxation throughout examination.	_____	_____
h. Provided cotton-tipped swab and wooden spatula for collection of Pap smear.	_____	_____
i. Had slides ready for examiner to spread collected material.	_____	_____
j. Marked slides appropriately or used pre-marked slides to indicate collection sites as endocervical (E), cervical (C) and vaginal (V).	_____	_____

1696

		YES	NO
k.	Sprayed fixative on slides to to set collected material.		
l.	Provided generous amount of lubricant on finger of examiner for rectal examination.		
m.	Provided tissue for examiner to remove excess lubricant from anal area.		
n.	Assisted patient out of dorsal recumbent or lithotomy position.		
22.	For examination of male genitalia and rectum:		
a.	With patient in supine position, exposed genital area.		
b.	Provided gloves for examiner.		
c.	Assisted patient to Sim's position or to standing position leaning forward across examination table for rectal examination.		
d.	Adjusted drape to expose anal area.		
e.	Provided generous amount of lubricant to examiner's finger.		
f.	Encouraged patient to breathe slowly and deeply to aid in relaxation during examination.		
g.	Provided examiner with tissue to remove excess lubricant from rectal area.		
h.	Assisted patient to sitting or supine position.		

1697

	YES	NO
23. Assisted examiner in completing examination of nervous and musculoskeletal systems as indicated.	____	____
24. Throughout examination, encouraged patient and observed patient for indications of pain or adverse reactions to examination.	____	____
25. Assisted patient to dress, or rearranged gown and bedding.	____	____
26. Answered any questions patient had and provided any instructions patient needed.	____	____
27. Completed all laboratory requisitions, labeled specimen containers, and sent to lab.	____	____
28. Disposed of all disposable equipment and cleaned reusable equipment in appropriate manner.	____	____
29. Cleaned surfaces of examining table or replaced with fresh coverings.	____	____
30. Washed hands.	____	____
31. Evaluated according to established criteria.	____	____
32. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Gathered appropriate equipment	4	3	2	1
Checked equipment for function	4	3	2	1
Assisted in organized manner	4	3	2	1
Provided physical and emotional support to patient	4	3	2	1
Handled and routed specimens correctly	4	3	2	1
Cleaned and restocked examination area	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date) (Evaluator's Signature)

(Evaluator's Position)

1700

PRACTICAL TEST 7

ASSESS THE PATIENT

XII

JOB SHEET 7

Perform an initial physical assessment.

STUDENT'S NAME ______________ DATE ________

EVALUATOR'S NAME ______________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Asked if the patient had any particular problems or complaints.	____	____
2. Checked for medical or nursing diagnoses which would alter procedure.	____	____
3. Washed hands.	____	____
4. Gathered all equipment.	____	____
5. Provided privacy.	____	____
6. Explained procedure to patient.	____	____
7. Raised bed to comfortable working height.	____	____
8. Applied draping material, if applicable.	____	____
9. Assessed general mental status.	____	____
10. Used penlight to assess pupil reaction and color of conjunctiva.	____	____

	YES	NO
11. Inspected visible skin and mucous membranes, observing color.	____	____
12. Palpated skin to assess skin temperature and moisture on surface of skin.	____	____
13. Obtained vital signs.	____	____
14. Auscultated apical pulse, noting especially rhythm and volume.	____	____
15. Auscultated breath sounds, listening over anterior, posterior, and lateral surfaces down the length of the chest cavity.	____	____
16. Inspected chest for respiratory movements, shape, and symmetry.	____	____
17. Auscultated bowel sounds in each quadrant.	____	____
18. Inspected abdomen for distention, scars, suture lines, or dressings.	____	____
19. Palpated abdomen lightly over all quadrants to detect distention or tenderness.	____	____
20. Inspected perineal area for signs of drainage from urinary meatus or female vagina.	____	____
21. Held out index fingers and asked patient to grasp them, noting equality of grasp.	____	____
22. Inspected hands for presence of edema.	____	____
23. Assessed for skin turgor and capillary refill.	____	____
24. Observed range of motion in upper extremities.	____	____

	YES	NO
25. Had patient move legs or press feet against examiner's palms, noting equality of movement and strength.	____	____
26. Inspected skin color of lower extremities.	____	____
27. Inspected ankles and feet for signs of edema.	____	____
28. Assessed capillary refill of lower extremities.	____	____
29. Palpated pedal pulses.	____	____
30. Tried to elicit Homan's sign by pressing toes backward in plantar flexion.	____	____
31. Observed range of motion in lower extremities.	____	____
32. Observed all equipment attached to patient to determine that it was intact and functioning properly.	____	____
33. Checked all equipment present for emergency use to determine that it was functioning properly.	____	____
34. Included any additional assessments relative to the patient's condition.	____	____
35. Made patient comfortable.	____	____
36. Returned bed to lowest level, and raised side rails.	____	____
37. Made sure call light was within easy reach.	____	____
38. Washed hands.	____	____

	YES	NO
39. Evaluated according to established criteria.	____	____
40. Documented appropriately.	____	____

EVALUATOR'S COMMENTS

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Completed assessment correctly in systematic manner	4	3	2	1
Maintained privacy	4	3	2	1
Performed focus assessments as indicated	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

1704

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1705

WRITTEN TEST

ASSESS THE PATIENT

XII

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with assessment to their correct definitions. Write the correct letter in the blank.

Part 1

______ 1. Brief assessment of neurological function

______ 2. Information obtained by observations of an examiner

______ 3. Gathering information

______ 4. Gathering information pertaining to a specific problem

______ 5. Brief assessment of neurological and circulatory function to a body part

______ 6. Information obtained by listening to an account of the patient's experience

______ 7. A complete assessment done on admission to a health-care institution

______ 8. Information gathered at the onset of a specific time period of patient care such as at the beginning of a shift

a. Admission assessment

b. Assessment

c. Auscultation

d. Focus assessment

e. Initial assessment

f. Inspection

g. Neuro check

h. Neurovascular check

i. Objective data

j. Orientation

k. Pap smear

l. Subjective data

Part 2

______1. Return of blood to a body part after pressure to the area has been released

______2. Resting with knees and chest on bed

______3. Awareness of person, place, and time

______4. Sounds associated with digestion assessed by auscultating the abdomen

______5. Abnormal breath sounds

______6. Lack of awareness of person, place or time

______7. Auscultation of air moving through the lungs

______8. Test to determine the presence of cervical cancer

a. Adventitious breath sounds

b. Bowel sounds

c. Breath sounds

d. Capillary refill

e. Disorientation

f. Genitopectoral position

g. Knee-chest position

h. Lithotomy position

i. Orientation

j. Papanicolaou smear

k. Percussion sounds

l. Pernicious breath sounds

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Part 3

_______1. Gathering information by tapping a body part

_______2. Instrument for viewing the ear

_______3. Instrument for examination of body canals

_______4. Gathering information by listening over areas of the body with a stethoscope

_______5. Gathering information by looking

_______6. Instrument used for assessing reflex activity by tapping at several points on the body

_______7. Gathering information using the sense of touch

_______8. Instrument for viewing the interior or the eye

a. Assessment

b. Auscultation

c. Capillary refill

d. Homan's sign

e. Inspection

f. Ophthalmoscope

g. Orientation

h. Otoscope

i. Palpation

j. Percussion

k. Percussion hammer

l. Speculum

Part 4

______1. Covering with fabric or paper material to avoid exposure during examination

______2. Resting with the knees and chest on the bed

______3. Lying on the back with the legs abducted and in stirrups

______4. Standing upright

______5. Lying on the back with the knees flexed and feet resting on the bed

______6. Pain in the calf when the examiner pushes the toes backward in dorsal flexion

a. Capillary refill

b. Dorsal recumbent position

c. Draping

d. Erect position

e. Genupectoral position

f. Homan's sign

g. Inspection

h. Lithotomy position

i. Neuro check

OBJECTIVE 2 **List reasons for performing assessments and examinations.**

____

____

____

____

____

____

____

____

____

OBJECTIVE 3

Distinguish between objective and subjective symptoms. Write an "S" before subjective symptoms and an "O" before objective symptoms.

______1. Pain

______2. Urine output

______3. Weight

______4. Rash

______5. Nausea

______6. Unsteady gait

______7. Ringing in ears

______8. Bloody wound drainage

______9. Blurred vision

_____10. Edema

OBJECTIVE 4

Distinguish among the four basic assessment techniques used in physical assessment. Write an "A" before auscultation techniques, an "I" before inspection, a "P" before palpation and an "R" before percussion.

______1. The nurse uses a stethoscope to listen to the apical pulse.

______2. The nurse touches the skin to determine temperature.

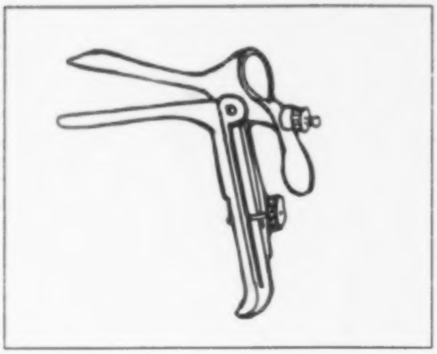
______3. The nurse looks at a skin lesion.

______4. The doctor taps on the chest.

______5. The doctor uses the hands to locate the position of abdominal organs.

______6. The nurse uses a stethoscope to obtain a blood pressure.

OBJECTIVE 5 **Identify equipment used in physical assessment.**



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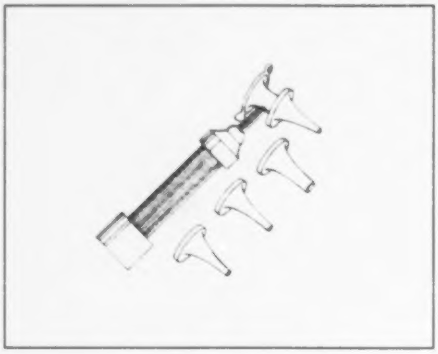

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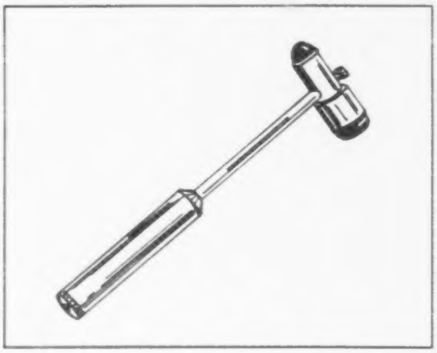

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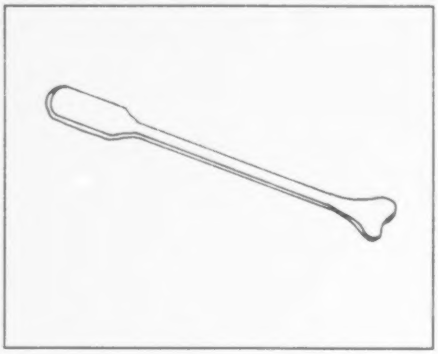

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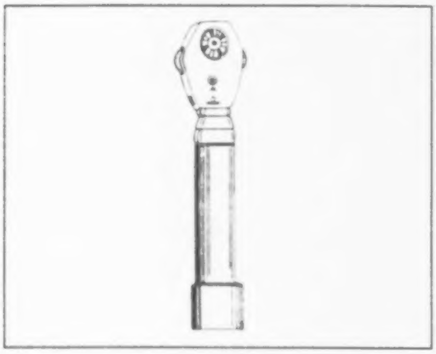

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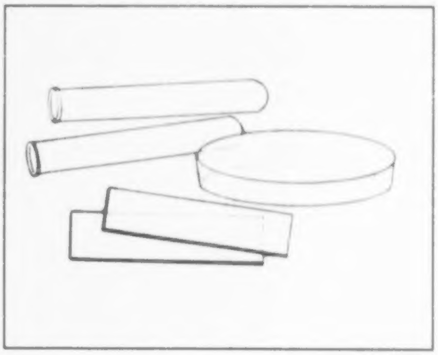

6. ____________________

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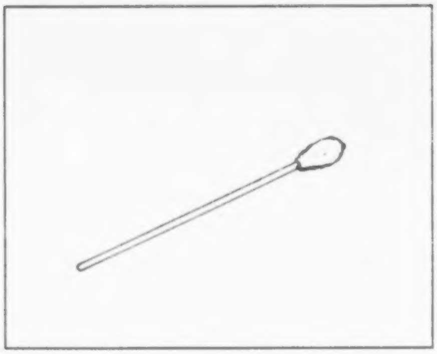

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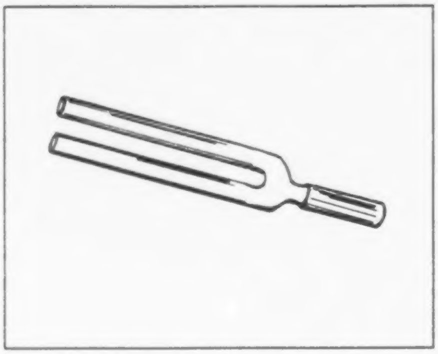

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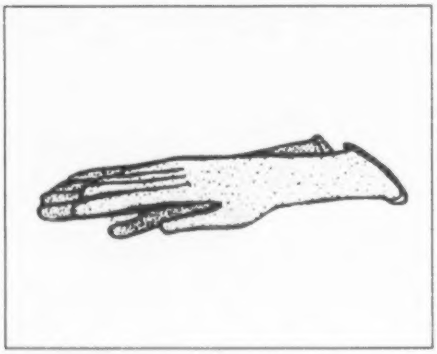

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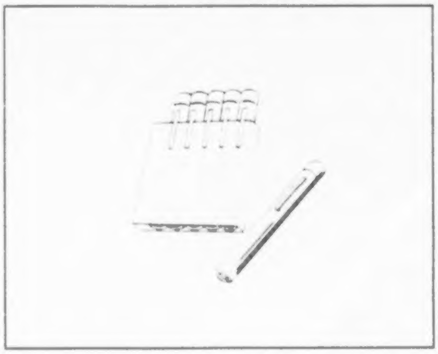

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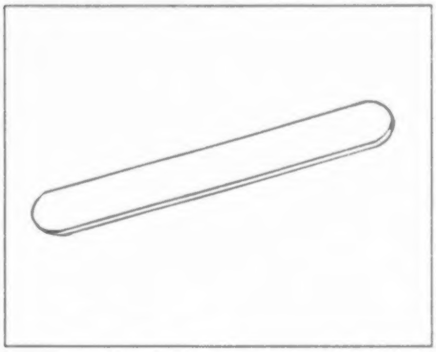

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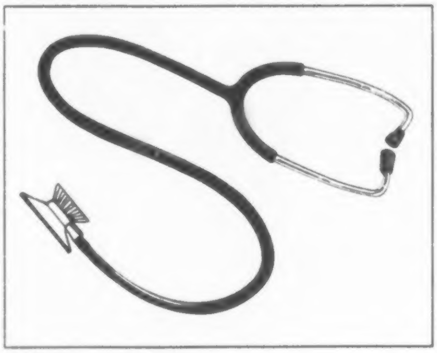
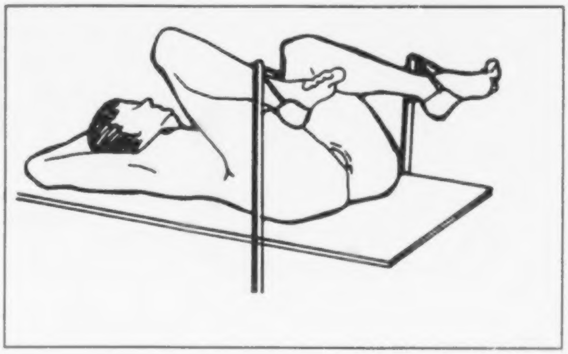


12. ______________________________

OBJECTIVE 6

Identify positions used in physical assessment. Write the name of the position illustrated in the blank beneath the illustration.



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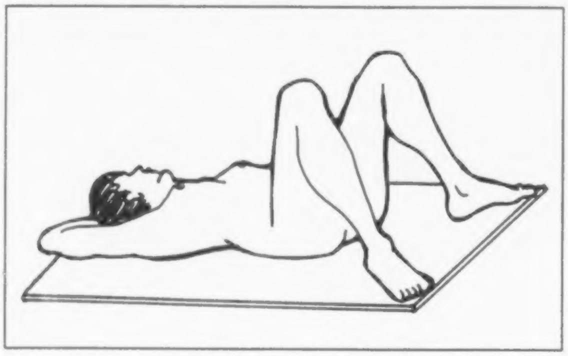

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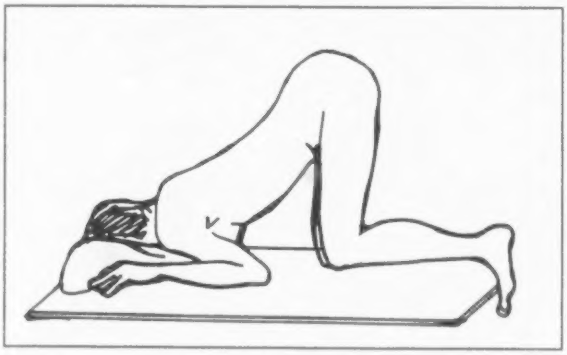

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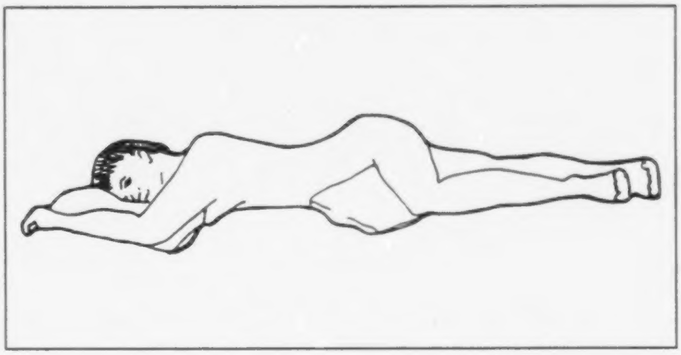

4.____________________________________

OBJECTIVE 7

Match assessment positions to the exams for which they are used. Write the correct letter in the blank. Answers may be used more than once.

______1. Sim's

______2. Erect or standing

______3. Dorsal recumbent

______4. Side-lying

______5. Lithotomy

______6. Sitting

______7. Knee-chest or genupectoral

______8. Prone

______9. Supine or horizontal recumbent

a. Abdominal examination

b. Anterior surfaces of the body

c. Assessment of anterior chest when the patient is in a weakened position

d. Assessment of posterior chest when the patient is in a weakened position

e. Chest (especially breast examination) and abdomen

f. Head and chest

g. Neurovascular examination

h. Pelvic and rectal examinations

i. Posterior surfaces of the body

j. Rectal examination

k. Rectal and colon examinations

l. Spine and musculoskeletal system in general

OBJECTIVE 8

Choose the correct word or phrase to complete statements about responsibilities of the nurse when assisting with a physical examination. Write the correct letter in the blank.

______1. Data which the nurse might gather before a physical examination could include ______.

a. chest x-ray
b. throat culture
c. vital signs
d. papanicolaou smear

______2. When gathering equipment for a physical examination, it will be helpful if the nurse will ______.

a. use only sterile equipment
b. check equipment for function
c. gather two of each item
d. wait until the examiner is present

______3. The nurse can best prepare the patient psychologically for a physical examination by ______.

a. allowing the patient to keep clothes on
b. keeping equipment to be used out of sight
c. keeping conversation to a minimum
d. explaining what will be taking place

______4. During a physical examination the nurse can assist the patient by ______.

a. assisting with position changes
b. leaving the patient alone with the examiner
c. encouraging the patient to breathe rapidly
d. removing all draping material

______5. The nurse may be in a better position than the examiner to ______.

a. collect specimens
b. palpate the abdomen
c. examine range of motion in the joints
d. observe the patient's reactions

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______6. When specimens are collected during a physical exam ______.

a. the nurse collects all specimens
b. it is painful for the patient
c. they could contain pathogenic organisms
d. the examiner sends them to the lab

______7. When a physical examination is completed, the nurse would most likely be able to assist by ______.

a. repeating instructions given by the examiner
b. bathing the patient
c. administering oxygen
d. leaving the room immediately

______8. Responsibilities in relation to equipment could include ______.

a. running cold water over any to be inserted into a body opening
b. handing equipment to the examiner when needed
c. cleaning all equipment with alcohol after use
d. leaving used equipment in the examination room

OBJECTIVE 9

Choose the correct word or phrase to complete statements about types of physical assessments. Write the correct letter in the blank.

______1. The most complete assessment would be the ______.

a. focus assessment
b. neuro check
c. admission assessment
d. initial assessment

______2. The assessment necessary when a leg is in a cast is the ______.

a. initial assessment
b. neuro check
c. neurovascular assessment
d. admission assessment

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______3. Repeatedly checking vital signs for a post-op patient would be an example of a/an ______.

a. neuro check
b. neurovascular assessment
c. initial assessment
d. focus assessment

______4. The assessment likely to be included in a neurovascular assessment is the ______.

a. pupil reaction
b. breath sounds
c. skin turgor
d. capillary refill

______5. The initial assessment would be done ______.

a. on admission to a health care facility
b. at the time of discharge
c. at the beginning of a shift
d. in the doctor's office

______6. As a part of a neuro check, the nurse might ______.

a. ask the patient the date
b. ask the patient's family about favorite foods
c. palpate the pedal pulse
d. try to elicit a positive Homan's sign

OBJECTIVE 10

Choose the correct word or phrase to complete statements about guidelines for assessing the skin. Write the correct letter in the blank.

______1. If skin color is difficult to assess, the nurse may inspect ______.

a. hair
b. ear lobes
c. mucous membranes
d. axillary area

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______2. Assessment techniques for the skin should include ______.

a. percussion and palpation
b. inspection only
c. auscultation, percussion and palpation
d. inspection and palpation

______3. Assessment of skin turgor tells us about ______.

a. moisture content of the skin
b. age of the individual
c. nutritional status
d. nerve supply to the skin

______4. A term which could be applied when an individual is drenched with sweat would be ______.

a. edema
b. jaundice
c. diaphoresis
d. serous

______5. A reddened area of the skin is ______.

a. jaundice
b. erythema
c. mottling
d. pallor

______6. A yellowish discoloration of the skin is ______.

a. pallor
b. mottling
c. jaundice
d. erythema

______7. A lack of color; white appearance is ______.

a. mottling
b. jaundice
c. necrotic
d. pallor

______8. A bluish discoloration of the skin is ______.

a. cyanosis
b. pallor
c. mottling
d. necrotic

______9. A gray or black area associated with dead or dying tissue is ______.

a. pallor
b. mottling
c. necrotic
d. cyanosis

______10. Unevenly distributed bluish or purplish areas over the skin are ______.

a. cyanosis
b. erythema
c. mottling
d. necrotic

______11. A bruise is also known as a(n) ______.

a. excoriation
b. ecchymosis
c. petechiae
d. fissure

______12. A crack in the skin is a(n) ______.

a. abrasion
b. scar
c. laceration
d. fissure

______13. A mark left on the skin after healing is a(n) ______.

a. fissure
b. scar
c. abrasion
d. ulcer

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______14. A rubbed or scraped area is a(n) ______.

a. ulcer
b. scar
c. excoriation
d. laceration

______15. A crater-like area on the skin is a(n) ______.

a. scar
b. fissure
c. ulcer
d. abrasion

______16. Small purplish hemorrhagic areas are ______.

a. fissures
b. petechiae
c. scars
d. ecchymosis

______17. An area where skin has been removed by scraping or scratching is a(n) ______.

a. abrasion
b. scar
c. ulcer
d. fissure

______18. A jagged cut is a(n) ______.

a. laceration
b. petechiae
c. fissure
d. abrasion

______19. Drainage that is a clear, colorless fluid is ______.

a. sanguineous
b. serous
c. serosanguineous
d. purulent

_____20. Drainage which contains pus is ______.

a. mucoid
b. mucopurulent
c. purulent
d. serous

_____21. Drainage that is a pink-tinged clear fluid is ______.

a. sanguineous
b. serosanguineous
c. mucoid
d. serous

_____22. Drainage which contains mucous and pus is ______.

a. purulent
b. mucopurulent
c. mucoid
d. serous

_____23. A bloody drainage is ______.

a. serous
b. purulent
c. serosanguineous
d. sanguineous

_____24. Drainage containing mucus is ______.

a. mucoid
b. serosanguineous
c. sanguineous
d. mucopurulent

OBJECTIVE 11

Choose the correct word or phrase to complete statements about guidelines for physical assessments. Write the correct letter in the blank.

______1. The order for most physical assessments would be described as ______.

a. front to back
b. head-to-toe
c. general to specific
c. random

______2. Apical pulse and breath sounds are assessed by ______.

a. palpation
b. percussion
c. inspection
d. auscultation

______3. Changes in the overall shape of the chest might indicate ______.

a. chronic respiratory problems
b. an infectious disease
c. the need for surgery
d. X-ray studies are necessary

______4. When assessing breath sounds, the nurse should place the stethoscope ______.

a. over the clavicle and sternum on the anterior chest
b. over the scapula and vertebrae on the posterior chest
c. at points on the anterior, posterior and lateral chest
d. at two to three points on the diseased side of the chest

______5. A musical or whistling sound heard an inspiration or expiration is a(n) ______.

a. crackle
b. pleural friction rub
c. rhonchi
d. wheeze

______6. Coarse, harsh gurgling sounds usually heard on expiration are ______.

a. crackles
b. pleural friction rubs
c. gurgles
d. wheezes

______7. A grating sound usually heard over the lower anterior and lateral chest is a(n) ______.

a. crackle
b. pleural friction rub
c. gurgles
d. wheeze

______8. Fine crackling sounds usually heard during inspiration are ______.

a. crackles
b. pleural friction rubs
c. gurgles
d. wheezes

______9. When assessing the abdomen the nurse should ______.

a. describe locations by quadrant
b. obtain all data by palpation
c. listen for stertor or stridor
d. expect the patient to experience pain

______10. The nurse assesses for Homan's sign ______.

a. in either upper extremity
b. using a percussion hammer
c. by dorsiflexion of the foot
d. when edema is present

______11. Physical assessment data obtained by the nurse ______.

a. is limited to the body itself
b. includes items attached to the patient
c. is recorded only on admission
d. should be the same for all patients

NOTICE The following job sheets are not part of the Written Test. If they have not be completed, check with your instructor.

OBJECTIVE 12 **Demonstrate the ability to:**

a. **Weigh a patient.** RATING ______

b. **Measure a patient's height/length.** RATING ______

c. **Evaluate vision.** RATING ______

d. **Evaluate hearing.** RATING ______

e. **Perform blood glucose monitoring.** RATING ______

f. **Assist with a physical examination.** RATING ______

G. **Perform an initial physical assessment.** RATING ______

OBJECTIVE 1

Part I

1. g
2. i
3. b
4. d
5. h
6. l
7. a
8. e

Part 2

1. d
2. g
3. i
4. b
5. a
6. e
7. c
8. j

Part 3

1. j
2. h
3. l
4. b
5. e
6. k
7. i
8. f

Part 4

1. c
2. e
3. h
4. d
5. b
6. f

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OBJECTIVE 2

- Gather baseline data on a patient newly admitted to a health-care facility.
- Verify or discount information given by the patient or others during an interview.
- Monitor the progress of an illness or specific condition.
- Evaluate medical and nursing interventions.
- Encourage preventive health care, as in a routine or annual physical examination.

OBJECTIVE 3

1. S
2. O
3. O
4. O
5. S
6. O
7. S
8. O
9. S
10. O

OBJECTIVE 4

1. A
2. P
3. I
4. R
5. P
6. A

OBJECTIVE 5

1. Vaginal speculum
2. Otoscope
3. Percussion hammer
4. Wooden spatula
5. Ophthalmoscope
6. Tubes, culture plates, and slides
7. Cotton tipped applicators
8. Tuning fork
9. Gloves
10. Flashlight/penlight
11. Tongue blade
12. Stethoscope

OBJECTIVE 6

1. Lithotomy
2. Dorsal recumbent
3. Knee-chest or Genupectoral
4. Sim's

OBJECTIVE 7

1. j
2. l
3. h
4. d
5. h
6. f
7. k
8. i
9. e

OBJECTIVE 8

1. c
2. b
3. d
4. a
5. d
6. c
7. a
8. b

OBJECTIVE 9

1. c
2. c
3. d
4. d
5. c
6. a

OBJECTIVE 10

1. c
2. d
3. a
4. c
5. b
6. c
7. d
8. a
9. c
10. c
11. b
12. d
13. b
14. c
15. c
16. b
17. a
18. a
19. b
20. c
21. b
22. b
23. d
24. a

OBJECTIVE 11

1. b
2. d
3. a
4. c
5. d
6. c
7. b
8. a
9. a
10. c
11. b

OBJECTIVE 12

Refer to Practical Test ratings for Job Sheets 1-7.

OBJECTIVE SHEET

APPLY HEAT AND COLD APPLICATIONS

XIII

INTRODUCTION

Heat and cold applications are frequently used in the clinical setting and by just about everybody in their homes, work and leisure activities. It seems so simple. However, nurses have to understand the effects of heat and cold as well as the safety hazards associated with these applications to use them effectively and guide others in the most appropriate use.

UNIT OBJECTIVE

After completing this unit the student should be able to use heat and cold safely and effectively. The student will show these competencies by completing job sheets and a written test with a minimum of 85% accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with application of heat and cold to their definitions.
2. Distinguish between the effects of heat and cold applications.
3. Distinguish between the effects of moist and dry applications.
4. Choose patients at risk for application of heat and cold.
5. Choose the correct word or phrase to complete statements about safety guidelines for the application of heat and cold.
6. Match types of heat applications to their descriptions.
7. Match types of cold applications to their descriptions.
8. Match temperature conditions to their corresponding temperature ranges.
9. Demonstrate the ability to:
    a. Apply a chemical hot pack. (Job Sheet 1)
    b. Use an aquathermia pad. (Job Sheet 2)
    c. Apply a warm, wet compress. (Job Sheet 3)
    d. Assist with a soak/whirlpool. (Job Sheet 4)

e. Give a sitz bath. (Job Sheet 5)

f. Apply an ice pack. (Job Sheet 6)

g. Apply a chemical cold pack. (Job Sheet 7)

h. Apply a cold, moist compress. (Job Sheet 8)

i. Give a tepid sponge bath. (Job Sheet 9)

SUGGESTED ACTIVITIES

APPLY HEAT AND COLD APPLICATIONS XIII

PREPARATION

- Review unit and plan presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.
- Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.

  NOTE: Supply guest speakers with the Objective Sheet, information Sheet and any other components you want them to cover.

- **HOSA** Integration
  - Assist students to conduct a chapter service project on the effects of heat and cold applications.
  - Develop objectives for service project and identify a theme.
  - Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
  - Plan a community or school health project that involves disseminating pamphlets.

DELIVERY

Objective 1

- Discuss terms and definitions associated with heat and cold application.

Objectives 2-5

- Discuss guidelines for assessing the effects of heat and cold.

- Show video *Local Application of Heat and Cold* or *Warm and Cold Applications*.
- Discuss various instances when either heat or cold might be used and determine the benefit derived from the application.

Objective 6

- Discuss forms of heat application.
- Have various materials for heat applications available for students to see.

Objective 7

- Discuss forms of cold applications.
- Have various materials for cold applications available for students to see.

Objective 8

- Discuss temperature ranges for heat and cold applications.
- Have water at various temperatures available along with a bath thermometer so students can feel various temperatures.

APPLICATION

Objective 9

- Discuss administration of a chemical hot pack.
- Discuss use of an aquathermia pad.
- Have students demonstrate all procedures and complete Job Sheets 1 and 2.
- Discuss application of warm, moist compresses.
- Have students apply warm, moist compresses and complete Job Sheet 3.
- Discuss soaks and whirlpool treatments.
- Have students demonstrate a soak and complete Job Sheet 4.
- Discuss administration of a sitz bath.

- Have students demonstrate a sitz bath in the clinical area and complete Job Sheet 5.
- Discuss application of an ice pack.
- Have students demonstrate application of an ice pack and complete Job Sheet 6.
- Discuss application of a chemical cold pack.
- Have students demonstrate application of a chemical cold pack and complete Job Sheet 7.
- Discuss application of cold, moist compresses.
- Have students demonstrate application of cold, moist compresses and complete Job Sheet 8.
- Discuss a tepid sponge bath.
- Have students demonstrate a tepid sponge bath on a laboratory mannikin and complete Job Sheet 9.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual study as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.
- Complete appropriate section of competency profiles.
- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Local Application of Heat and Cold*, available from Medcom/Trainex, Box 3225, Garden Grove, CA 92642.
- *Warm and Cold Applications*, available from Medcom/Trainex, Box 3225, Garden Grove, CA 92642.

UNIT REFERENCES

- Hogan, Jean and Sheila A. Sorrentino. *Textbook for Long-Term Care Assistants*. The C.V. Mosby Company, St. Louis, Missouri, 1988.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures*, (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care*, (4th ed). J.B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques*. The C.V. Mosby Company, St. Louis, Missouri, 1986.
- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C.V. Mosby Company, St. Louis, Missouri, 1987.

- Schniedman, Rose B., Susan S. Lambert and Barbara R. Wander. *Being a Nursing Assistant*, (5th ed). Prentice Hall, Englewood Cliffs, New Jersey, 1989.

- Sloan, Jamee Reid, *Practical Nursing-Volume 1*. Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.

INFORMATION SHEET	APPLY HEAT AND COLD APPLICATIONS	XIII

OBJECTIVE 1

Match terms associated with application of heat and cold to their definitions.

Compress — Material used to apply moist heat or cold

Ischemia — Interruption of blood supply

Maceration — Softening by contact with moisture

Suppuration — Production of purulent material (pus)

Tepid — Temperature slightly below body temperature

Vasoconstriction — Decrease in size of blood vessel

Vasodilation — Increase in size of blood vessel

OBJECTIVE 2

Distinguish between the effects of heat and cold applications.

Since heat and cold are used so frequently, the nurse must be able to assess the effects and appropriateness of applications.

Understanding the physiological responses to heat and cold applications will enable you to use them more effectively. Heat applied to the body causes vasodilation or an increase in the diameter of blood vessels. Cold application causes vasoconstriction or a decrease in the diameter of blood vessels. Other effects follow these basic physiological reactions.

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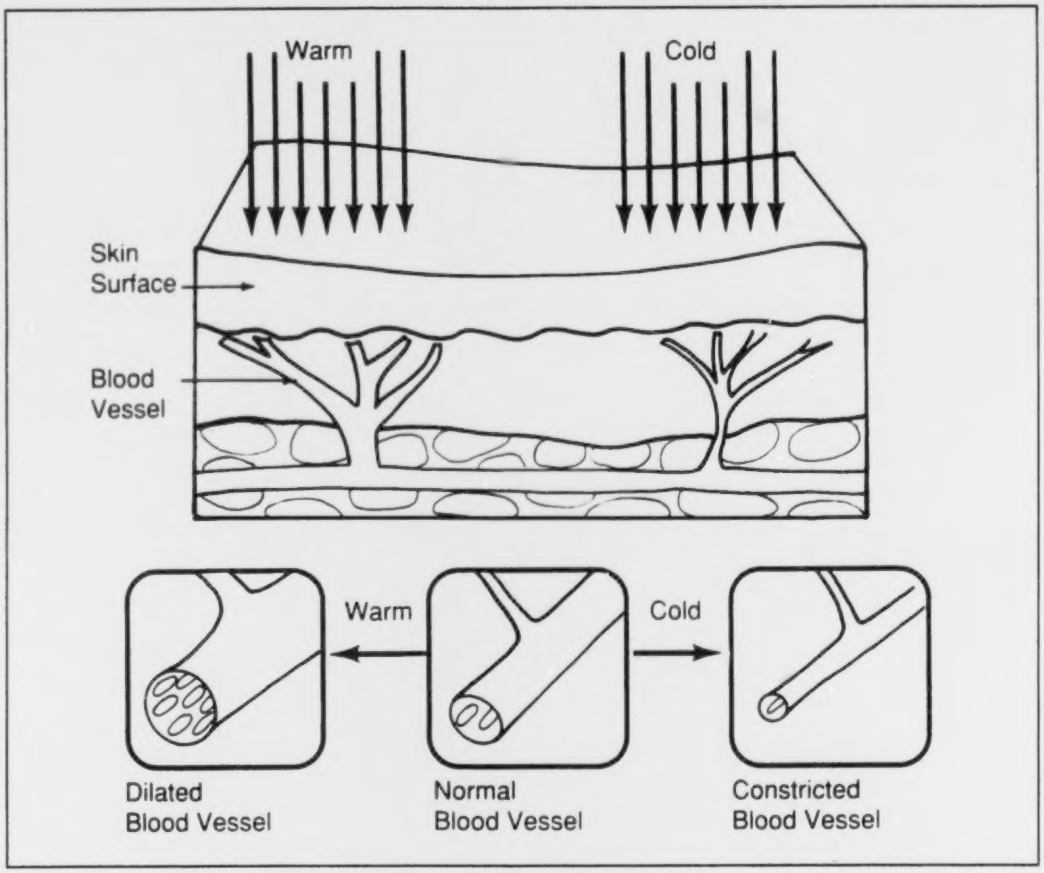
Warm
Cold
Skin Surface
Blood Vessel
Warm
Cold
Dilated Blood Vessel
Normal Blood Vessel
Constricted Blood Vessel

EFFECTS OF HEAT	**EFFECTS OF COLD**
Vasodilation	Vasoconstriction
Increased blood supply	Decrease blood supply
Increased supply of oxygen and nutrients	Decreases cell metabolism
Increased removal of waste products	Produces local anesthesia
Increases suppuration	Promotes blood coagulation
Relieves venous congestion	
Reduces muscle tension	

- **Heat** — Used to promote tissue healing, to reduce edema and to relieve pain. Heat increases the inflammatory response, which is important in healing.

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- **Cold** — Used to prevent edema, to control bleeding and to relieve pain. Cold is an important first-aid measure.

OBJECTIVE 3

Distinguish between the effects of moist and dry applications.

Heat and cold may be applied moist or dry. The following table summarizes the effects of each.

CHOICE OF DRY OR MOIST APPLICATIONS	
Advantages	**Disadvantages**
MOIST APPLICATIONS Moist application reduces drying of skin and softens wound exudate. Moist compresses conform well to body area being treated. Moist heat penetrates deeply into tissue layers. Warm moist heat does not promote sweating and insensible fluid loss.	**MOIST APPLICATIONS** Prolonged exposure can cause maceration of the skin. Moist heat will cool rapidly because of moisture evaporation. Moist heat creates a greater risk for burns to the skin since moisture conducts heat.
DRY APPLICATIONS Dry heat has less risk of burns to skin than moist applications. Dry application does not cause skin maceration. Dry heat retains temperature longer, since it is not influenced by evaporation.	**DRY APPLICATIONS** Dry heat increases body fluid loss through sweating. Dry applications do not penetrate deep into tissues. Dry heat causes increased drying of skin.

Source: Reproduced by permission from Potter, Patricia A. and Perry, Anne C.: *Basic Nursing: Theory and Practice, ed. 2.* St. Louis, 1991, Mosby-Year Book, Inc.

Most hot and cold applications are local applications, meaning they are applied to only a small area of the body. The tepid sponge bath is a systemic application, meaning that the whole body is affected.

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OBJECTIVE 4

Choose patients at risk for application of heat and cold.

Injury can occur with heat or cold applications if the nurse is not alert. Several factors should be considered.

Some patients are at greater risk for injury and some areas of the body are more easily damaged by heat or cold applications. Patients, conditions, or areas which demand greater caution include:

- Children, age 5 and under
- Elderly (over 65)
- Unconsciousness
- Peripheral vascular disease (arteriosclerosis, diabetes)
- Damage to the nervous system (stroke, spinal cord injury)
- Broken areas of skin, scars, edematous areas, stomas
- Neck, eyelids, inner aspect of arm, chest, abdomen, and perineal area

OBJECTIVE 5

Choose the correct word or phrase to complete statements about safety guidelines for the application of heat and cold.

- **Equipment** — Various pieces of equipment may be involved in heat or cold application. These should be carefully checked for such problems as frayed or cracked electrical cords or parts, leaks or cracks in equipment, accuracy of gauges, or control devices.
- **Amount of time** — Heat and cold applications are most effective when they are used for 15 to 30 minutes at a time. The body will protect itself by reacting in the opposite manner expected when exposure becomes prolonged: Cold applications can actually produce vasodilation if left on the skin too long.

- **Adaptation** — Another phenomenon of the body with implications for safety is the ability of the nerve receptors to adapt. After a short period of time, warmth is not perceived to be as warm as it did at first. Patients may want to increase heat because they think the application is cooling when it is not. The increase could, of course, result in burns.

- **Skin** — The nurse must assess the patient before and after applications of heat and cold. The skin should be inspected to be sure it is intact with adequate nerve response and circulation. In addition, the nurse must consider variables such as age, past history, and present diagnosis.

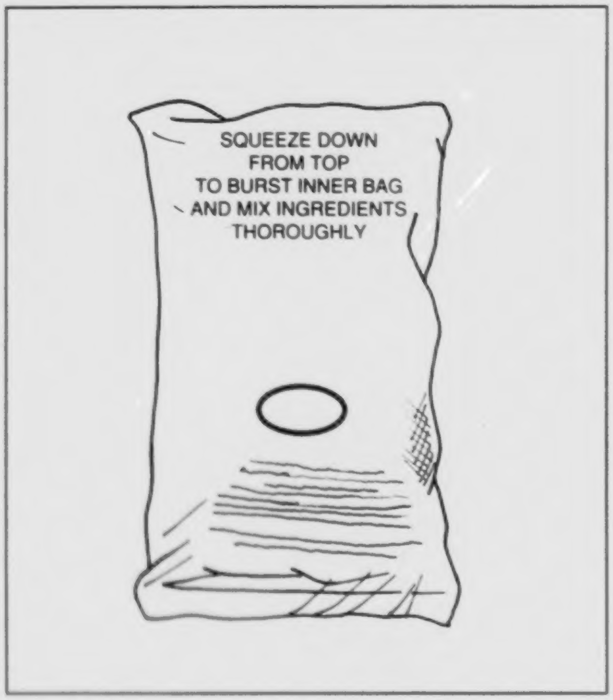
  After removal of *heat applications*, the skin should be assessed for redness and blistering. The skin may be pink, but this should clear soon after the application is removed. The skin should be warm to touch, but this too should reverse itself after removal of the application. Listen for complaints of burning sensation.

  After removal of *cold applications*, the skin should be assessed for mottling, pallor or cyanosis. This could indicate ischemia. Slight pallor and coolness of the skin is expected, but should clear after the application is removed. Listen for complaints of numbness or even a burning sensation.

OBJECTIVE 6 **Match types of heat applications to their descriptions.**

Common heat applications include:

- **Chemical hot pack** — A commercially prepared product with liquid or gel in separate compartments. Mixing the contents by kneading, snapping, or striking will produce heat. Hot packs are usually applied to a small area of the body to promote healing and relieve pain.


SQUEEZE DOWN
FROM TOP
TO BURST INNER BAG
AND MIX INGREDIENTS
THOROUGHLY

Source: Reprinted with permission from the Hospital Research and Educational Trust.

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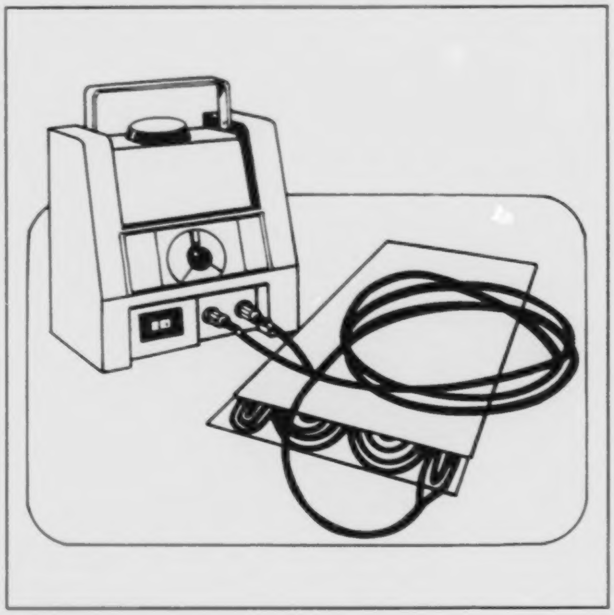
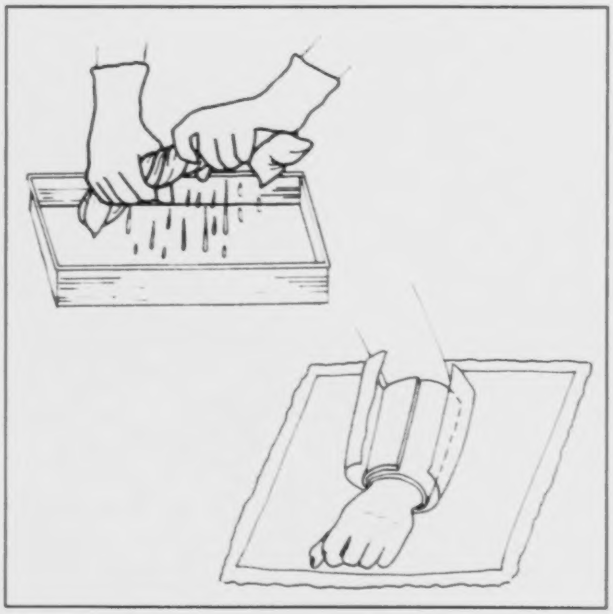
- **Aquathermia pad (aqua K pad, aquamatic K pad or K pad)** — Consists of a heating unit with a reservoir for distilled water and a motor that forces the water through a pad filled with channels for the circulating fluid. It may be used alone or with warm, wet compresses.



Source: Reprinted with permission from the Hospital Research and Educational Trust.

- **Warm, wet compress** — Application of warm, wet material to an area of the body. If there is a break in the skin, sterile technique would be used.



- **Soak/whirlpool** — Immersion of an extremity in water. Agitation of the water may be included in the treatment.
- **Sitz bath** — Application of heat to the perineal area by seating the patient in warm water. A permanently installed sitz tub or disposable equipment placed on the toilet stool may be used.

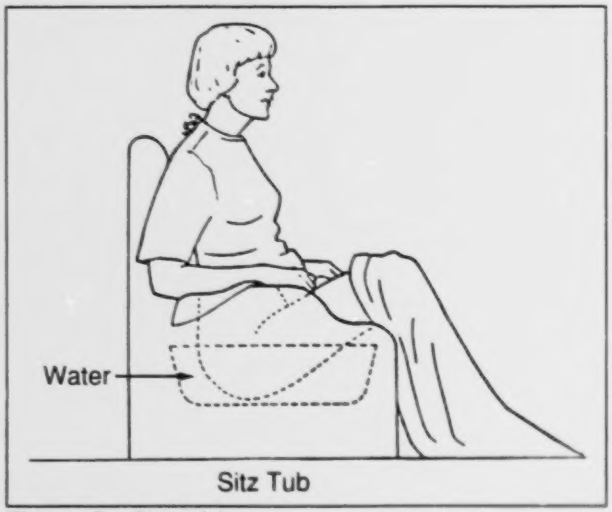


Figure 5 Sitz tub*

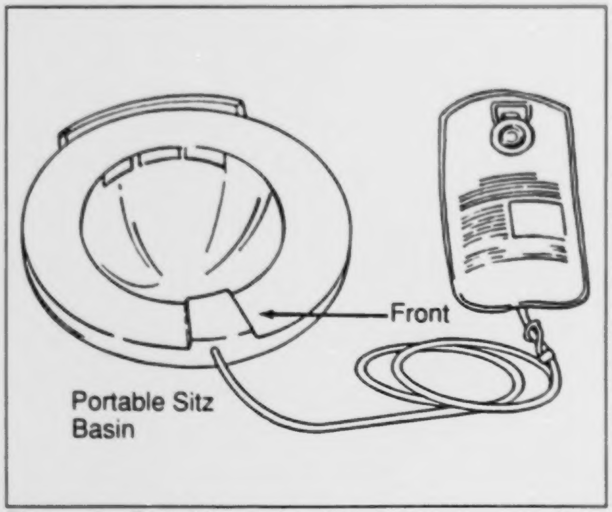


Figure 6 Portable sitz basin*

*Reproduced by permission from Hogan/Sorrentino: *Textbook for Long-Term Care Assistants*. St. Louis. 1988. The C.V. Mosby Company.

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OBJECTIVE 7

Match types of cold applications to their descriptions.
Common cold applications include:

- **Ice pack** — Rubber or vinyl containers filled with ice or gel
- **Chemical cold pack** — Commercially prepared product with fluid- or gel-filled compartments which produce cold by kneading, striking or snapping to mix the chemicals
- **Cold, moist compress** — Various materials such as gauze squares, wash cloths, or towels immersed in ice water and applied to the body
- **Cool or tepid sponge bath** — An intervention to reduce temperature

OBJECTIVE 8

Match temperature conditions to their corresponding temperature ranges.

Safety is a consideration when heat and cold are applied. Heat can burn and cold can cause an interruption in circulation. The nurse should know the temperatures which can be used safely. While the condition of the individual patient and the body part for the application must be considered, the following temperatures are considered to be descriptive of conditions ranging from very cold to very hot.

Very cold	Below 50 degrees °F. (10C)
Cold	50-65 degrees °F. (10-18C)
Cool	65-80 degrees °F. (18-27C)
Tepid	80-93 degrees °F. (27-34C)
Warm and neutral	93-98 degrees °F. (34-37C)
Hot	98-105 degrees °F. (37-40C)
Very Hot	105-115 degrees °F. (40-46C)

JOB SHEET 1

APPLY HEAT AND COLD APPLICATIONS

XIII

OBJECTIVE 9a

Apply a chemical hot pack.

INTRODUCTION

Chemical hot packs are commercially prepared in a variety of sizes to be available when needed and applied with a minimum of effort.

EQUIPMENT AND SUPPLIES

- Chemical hot pack
- Covering

NOTE: Some chemical hot packs have covering material included such as a pack designed especially for the perineal area. A towel or washcloth may be used if covering material is not a part of the pack. Disposable coverings are also available.

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Assess skin at site of application.
2. Assess circulatory status at site of application.
3. Assess sensation at site of application.
4. Assess patient's ability to communicate discomfort.
5. Note any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Gather equipment.
8. Check manufacturer's instructions for activating heat.
9. Check surface of pack for any leaks.

CAUTION!
BURN POSSIBLE. Chemicals in pack can burn patient's skin. CHECK PACK FOR LEAKS.

10. Provide privacy.

11. Explain procedure to patient.

Implementation

12. Position patient for application of pack.

13. Activate pack according to manufacturer's directions (Striking, kneading, snapping, etc.).

14. Apply covering if applicable.

15. Place in appropriate position for therapeutic effect.

Listening Skill
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communicate with clients/customers/patients

CAUTION!
BURN POSSIBLE. Lying on heat application device can intensify heat and cause burns. DO NOT ALLOW PATIENT TO LIE ON DEVICE.

16. Place the call light within easy reach.

17. Check position of pack and condition of patient's skin frequently during time of application.

18. Remove at end of designated time.

    NOTE: Packs maintain heat for various periods of time. A replacement pack may be needed if heat is not maintained for the length of time ordered.

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem in self/others

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/processes
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

Evaluation

19. Evaluate according to following criteria:

    a. Skin is warm and pink, but not red.

    b. Patient does not experience any burning sensation.

    c. Pink areas quickly return to normal color.

Documentation

20. Record:

    a. Type of application.

    b. Site of application.

    c. Length of application.

    d. Condition of skin prior to application.

    e. Condition of skin after application.

    f. Any complaints of patient.

APPLY HEAT AND COLD APPLICATIONS

**INSTRUCTIONAL
SUPPLEMENT
FOR
JOB
SHEET 1**

Skill development for:	READING SKILLS WRITING SKILLS SCIENCE SKILLS ORAL COMMUNICATION SKILLS INTERPERSONAL/RELATING SKILLS EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task:

READING SKILLS

- Interpreting forms and records
- Follow written instructions

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Investigating health issues

ORAL COMMUNICATION

- Applying active listening skills
- Giving/following oral directions
- Applying questioning techniques
- Applying/analyzing non-verbal communication
- Communicating with client/customer

INTERPERSONAL OR RELATING

- Analyzing/applying non-verbal communication
- Interacting with client/customer
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer

- If students have difficulty interpreting forms and records:
  - Examine the structure of the forms being used.
  - Stress the importance of learning medical terminology.
- If students have difficulty following written instructions:
  - Discuss the possible consequences of not following instructions precisely.
  - Have them read the instructions several times, noting the key words and ideas.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty investigating/applying principles of anatomy/physiology, have them review the appropriate units in *Body Structure and Function* or similar text.
- If students have difficulty investigating health issues, discuss the medical conditions that might require the application of heat or cold.

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- If students have difficulty applying active listening skills:
  - Urge them to organize their thoughts before directions are begun.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.
- If students have difficulty applying questioning techniques:
  - Instruct them to be prepared and have their questions organized before the communication begins.
  - Stress the importance of accurate questioning to identify subjective symptoms.
- If students have difficulty analyzing/applying non-verbal communication, discuss some ways in which patients reveal information non-verbally.

  EXAMPLE:
  Facial expressions
  Tone of voice
  Movements
  Body position
  Mannerisms

- If students have difficulty applying/analyzing non-verbal communication, discuss some ways in which the student can convey information non-verbally.

  EXAMPLE: The student can convey concern for the comfort and self-esteem of the patient by providing privacy during the procedure.

- If students have difficulty communicating with, interacting with, or dealing effectively with the client/customer, review listening skills, giving/following oral directions, applying questioning techniques, and non-verbal communication skills.

- If students have difficulty obtaining confidence of others:
  - Suggest they review communication and interpersonal or relating skills.
  - Suggest they review appropriate behavior.
  - Suggest that they review the procedure and the part they play in the procedure.
  - Review the proper appearance for a professional.
  - Discuss the importance of having a positive attitude.
  - Discuss with a trusted professional the reasons that may be contributing to the lack of confidence.
- If students have difficulty developing esteem in self/others:
  - Discuss the importance of treating the patient in a dignified manner.
  - Discuss the importance of esteem in all areas of life.
  - Review communication and interpersonal or relating skills.
- If students have difficulty mastering a specific job task/procedure:
  - Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.
  - Suggest they study each component of the procedure to determine which area is causing difficulty.
  - Review the entire procedure.
  - Team them with proficient students or professionals to practice the procedure.
- If students have difficulty applying safety practices/procedures:
  - Discuss the reasons for, and importance of, safety practices.

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- If students have difficulty applying safety practices/procedures, review the safety procedures relevant to the specific task.
- If students have difficulty developing good work habits/attitudes:
  - Encourage them to become familiar with the entire procedure before they being the work.
  - Discuss the role that good work habits and attitudes have in obtaining and retaining employment.
  - Discuss what behaviors and attitudes constitute good work habits.
  - Make sure the student knows what is expected of him or her.

JOB SHEET 2 APPLY HEAT AND COLD APPLICATIONS XIII

OBJECTIVE 9b

Use an aquathermia pad.

INTRODUCTION

The aquathermia (aquamatic, K) pad can be used to supply dry heat at a constant temperature or it can be used to keep hot wet-packs warm.

EQUIPMENT AND SUPPLIES

- Aquathermia control unit
- Pad

NOTE: Pads used may be disposable and may come in a variety of sizes to suit the area of the application.

- Distilled water
- Covering such as towel or pillow case for non-disposable pad
- Gauze, tape or ties for securing pad in place if needed

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

General Science Skills
- Use Scientific instruments (temperature control)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Assess skin at site of application.
2. Assess circulatory status at site of application.
3. Assess sensation at site of application.
4. Assess patient's ability to communicate discomfort.
5. Note any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Gather equipment.
8. Check electrical parts of unit for safety.
9. Check pad for any punctures.
10. Check temperature setting on control unit.

    NOTE: This is usually set at 105 degrees °F. in central supply.

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/processes
- Develop good work habits/attitudes

11. Fill control unit 2/3 full of distilled water.

12. Cover non-disposable pad with appropriate covering.

13. Provide privacy.

14. Explain procedure to patient.

Implementation

15. Position patient for application of pad.

16. Place pad on indicated area.

17. Secure with gauze, ties, or tape.

CAUTION!

BURN POSSIBLE. Pins may puncture channels containing fluid.
DO NOT USE PINS TO SECURE PAD.

---

18. Place call light within easy reach.

19. Check position of pad and condition of patient's skin frequently during time of application.

20. Remove at end of designated time.

Evaluation

21. Evaluate according to following criteria:

    a. Skin is warm and pink, but not red.

    b. Patient does not experience any burning sensation.

Documentation

22. Record:

    a. Type of application.

    b. Site of application.

- Deal effectively with clients/customers/ patients

c. Length of application.

d. Condition of skin prior to application.

e. Condition of skin after application.

f. Any complaints of patient.

APPLY HEAT AND COLD APPLICATIONS

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for: READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

READING SKILLS

— Interpreting forms and records

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Using scientific instrument (temperature control)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION

— Applying active listening skills

— Giving/following oral directions

— Applying questioning techniques

— Applying/analyzing non-verbal communication

— Communicating with client/customer

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INTERPERSONAL OR RELATING

— Analyzing/applying non-verbal communication

— Interacting with client/customer

— Obtaining confidence of others

— Developing esteem in self/others

EMPLOYABILITY

— Mastering a specific job task/procedure

— Applying safety practices/procedures

— Developing good work habits/attitudes

— Dealing effectively with client/customer

- If students have difficulty using the temperature control, demonstrate the use of the instrument.

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement 1.

JOB SHEET 3

APPLY HEAT AND COLD APPLICATIONS

XIII

OBJECTIVE 9c

Apply a warm, wet compress.

INTRODUCTION

Warm, wet compresses are a moist-heat application. They might be used for a number of situations including an infiltrated IV site, a sprain or a surgical site.

Warm wet compresses must be sterile if there is a break in the skin. Special, commercially prepared sterile materials are available. If sterile technique is not necessary, a variety of materials such as gauze squares, wash cloths, or towels may be used to suit the site being treated.

EQUIPMENT AND SUPPLIES

- Waterproof pad

For non-sterile application

- Appropriate compress material
- Warm water or prescribed solution at 105-115 degrees °F.
- Bath thermometer
- Water-proof material

NOTE: Plastic wrap or disposable underpads may be used to aid in retaining heat and preventing evaporation.

For sterile application

- Commercially prepared sterile dressing material
- Special hot wet-pack heater

or

- Sterile gauze dressings
- Sterile basin
- Sterile solution at 105-115 degrees °F.
- Sterile gloves
- Clean gloves (Optional)

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Assessment and Analysis

1. Assess skin at site of application.
2. Assess circulatory status at site of application.
3. Assess sensation at site of application.
4. Assess patient's ability to communicate discomfort.

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use Scientific instruments (thermometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

5. Note any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Gather equipment.
8. Provide privacy.
9. Explain procedure to patient.

Implementation

10. Position patient for application of compress.
11. Place waterproof material under site for compress.
12. For sterile compresses.
    a. Apply clean gloves to remove any dressing present.
    b. Remove gloves and wash hands.
    c. Open sterile packets. If using sterile gauze squares, place into sterile solution in sterile basin.
    d. Apply sterile gloves.
    e. Wring sterile compress material and place over affected area, observing patient for reaction to heat.
    f. Cover with dry sterile dressing.
13. For non-sterile compresses
    a. Place dressing material in prescribed solution.
    b. Wring compress material and place on site, observing patient's reaction to application.
    c. Cover with water-proof material.

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/processes
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

14. Reapply compress as necessary to maintain heat.

    NOTE: This will probably be every 5-10 minutes.

15. Continue for prescribed time.

Evaluation

16. Evaluate according to following criteria:

    a. Skin is warm and pink, but not red.

    b. Patient does not experience any burning sensation.

    c. Color returns to normal quickly after application.

Documentation

17. Record:

    a. Type of application.

    b. Site of application.

    c. Length of application.

    d. Condition of skin prior to application.

    e. Condition of skin after application.

    f. Any complaints of patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

READING SKILLS

— Interpreting forms and records

WRITING SKILLS

— Completing forms and records

MATHEMATICS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instrument (thermometer)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION

— Applying active listening skills

— Giving/following oral directions

- Applying questioning techniques
- Applying/analyzing non-verbal communication
- Communicating with client/customer

INTERPERSONAL OR RELATING

- Analyzing/applying non-verbal communication
- Interacting with client/customer
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer

- If students have difficulty using English and metric measures or making measurements:
  - Review units of measure in the English and metric systems.
  - Determine which system is used on the available instrument and demonstrate its use.
- If students have difficulty using the thermometer, demonstrate the use of the instrument.
- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

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JOB SHEET 4

APPLY HEAT AND COLD APPLICATIONS

OBJECTIVE 9d

Assist with a soak/whirlpool.

INTRODUCTION

Soaking an extremity in warm water or a medicated solution can aid in healing and increase comfort. In some instances, the soak may include agitation with a whirlpool. Whirlpools are usually found in physical therapy departments, but there may be some instances when the nurse is responsible for such therapy.

EQUIPMENT AND SUPPLIES

- Container for soak
- Water or prescribed solution at 105 degrees °F.
- Bath thermometer
- Towels
- Gloves if indicated
- Disinfectant for soak container

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (thermometer)

Assessment and Analysis

1. Assess skin at site of application.
2. Assess circulatory status at site of application.
3. Assess sensation at site of application.
4. Assess patient's ability to communicate discomfort.
5. Note any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Gather equipment.
8. Clean container with disinfectant.
9. Provide privacy.
10. Explain procedure to patient.

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Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Implementation

11. Add water or other prescribed solution.

    NOTE: Consider the extremity to be immersed when filling. The solution should cover the part being soaked, but not spill over the top when the extremity is placed in the solution.

12. Place extremity in solution, checking patient's reaction to temperature.

CAUTION!
BURN POSSIBLE. Water or solution may be too hot. REPLACE HOT SOLUTION WITH COOLER SOLUTION.

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

13. Cover container with towel to help retain heat.
14. If whirlpool is used, follow manufacturer's instructions to begin agitation.
15. If solution becomes too cool, remove extremity, pour out some of the solution and replace with warmer solution to return to desired temperature.
16. Continue soak for prescribed period of time.
17. Remove extremity from solution and pat dry with towels.
18. Assist patient with replacement of clothing.
19. Assist patient to comfortable position with call light within easy reach.
20. Empty solution from soak container and clean container with disinfectant.
21. Return all equipment to designated area.

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/processes
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

Evaluation

22. Evaluate according to following criteria:

    a. Skin is warm and pink, but not red.

    b. Patient does not experience any burning sensation.

    c. Skin quickly returns to normal color.

Documentation

23. Record:

    a. Type of application.

    b. Site of application.

    c. Length of application.

    d. Condition of skin prior to application.

    e. Condition of skin after application.

    f. Any complaints of patient.

BASIC SKILLS

APPLY HEAT AND COLD APPLICATIONS

XIII

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

READING SKILLS

— Interpreting forms and records

WRITING SKILLS

— Completing forms and records

— Following written instructions

MATHEMATICS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instrument (thermometer)

— Investigating health issues

ORAL COMMUNICATION

— Applying active listening skills

— Giving/following oral directions

- Applying questioning techniques
- Applying/analyzing non-verbal communication
- Communicating with client/customer

INTERPERSONAL OR RELATING

- Analyzing/applying non-verbal communication
- Interacting with client/customer
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer

- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheets 1 and 3.

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JOB SHEET 5 — APPLY HEAT AND COLD APPLICATIONS — XIII

OBJECTIVE 9e

Give a sitz bath.

INTRODUCTION

A sitz bath is meant to aid in healing and provide increased comfort for the perineal area. Occasionally, it is used as an aid when patients are having difficulty voiding. They would then be encouraged to void in the tub if their comfort level were increased by the warm fluid.

EQUIPMENT AND SUPPLIES

- Sitz tub or disposable sitz basin
- Bath thermometer
- Gown
- Towels
- Bath blanket
- Disinfectant for cleaning sitz tub

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use Scientific instruments (thermometer)

Assessment and Analysis

1. Assess skin at site of application.
2. Assess circulatory status at site of application.
3. Assess sensation at site of application.
4. Assess patient's ability to communicate discomfort.
5. Note any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Gather equipment.
8. Clean sitz tub with disinfectant solution.
9. Adjust room temperature as possible for patient's comfort.

   NOTE: A large part of the patient's body will be immersed in the tub. Chilling may occur.

10. Explain procedure to patient.

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/patients

11. Provide privacy by placing sign on door of tub room or bathroom.

12. Assist with removal of any dressings or perineal pads, wearing clean gloves and disposing of dressing material in appropriate manner.

Implementation

13. For sitz tub.

    a. Fill sitz tub with water at 100-105 degrees °F.

       NOTE: Remember that patient will displace water when seated in tub. Do not fill so full that the tub will overflow when patient is seated.

    b. Assist patient with removing clothing except for hospital gown.

    c. Assist patient into sitz tub, holding gown so it does not get wet.

    d. Provide towels as padding for legs, sacrum, and back as needed for patient's comfort.

14. For sitz basin.

    a. Raise toilet seat.

    b. Place basin over toilet bowl with opening for overflow toward front of bowl.

    c. Close clamp on tubing.

    d. Fill basin and reservoir bag with water at 100-105 degrees °F.

    e. Hang bag 12 inches above level of basin and fit tubing into groove in basin.

    f. Adjust clamp for slow release of water into basin.

    g. Assist patient to sit in the sitz bath, holding gown so it does not get wet.

15. Cover shoulders with bath blanket if patient is cold.

16. Place call light within easy reach.

17. Return frequently to check on patient while in sitz bath.

18. At end of prescribed time (usually 15-20 minutes), assist patient from tub.

⚠

CAUTION!

FALL POSSIBLE. Patient may feel faint due to increased blood flow to perineal area. ASSIST PATIENT FROM TUB.

19. Assist patient to dry area and dress in dry clothing. Reapply any dressings or perineal pads using appropriate technique.

20. Assist patient to return to bed and leave comfortable with call light within easy reach.

21. Drain sitz tub and clean with disinfectant or clean sitz basin and store in appropriate area.

22. Dispose of all linens in designated area.

23. Wash hands.

Evaluation

24. Evaluate according to following criteria:
    a. Skin is warm and pink, but not red.
    b. Patient does not experience any burning sensation.
    c. Skin quickly returns to normal color.

Documentation

25. Record:
    a. Type of application.

b. Site of application.

c. Length of application.

d. Condition of skin prior to application.

e. Condition of skin after application.

f. Any dressings or perineal pads removed and reapplied.

g. Any complaints of patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Refer to Instructional Supplement for Job Sheet 3.

JOB SHEET 6 APPLY HEAT AND COLD APPLICATIONS XIII

OBJECTIVE 9f

Apply an ice pack.

INTRODUCTION

Ice packs are frequently used in the clinical setting and at home. Gel-filled vinyl packs are prepared for use by freezing. Other containers are filled with ice at the time of use.

While heat applications are usually limited to 20 or 30 minutes at a time, ice packs may be used on a continuous basis for the first 24 hours after trauma or a surgical procedure. This means that the nurse must be diligent in checking and replacing packs that are no longer cold.

EQUIPMENT AND SUPPLIES

- Frozen gel-filled ice pack

  or

- Ice bag which holds ice

  NOTE: A special ice bag, cap, or collar may be used, but for some locations, gloves filled with ice are ideal. In the home, double thicknesses of plastic bags may be used.

- Cover

  NOTE: Covers may be specially prepared cloth or disposable paper covers or they may be a wash cloth or towel.

- Ice
- Scoop for ice

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Assess skin at site of application.

2. Assess circulatory status at site of application.

3. Assess sensation at site of application.

4. Assess patient's ability to communicate discomfort.

5. Note any medical or nursing diagnoses which would alter procedure.

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Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

Planning

6. Wash hands.

7. Gather equipment.

8. Provide privacy.

9. Explain procedure to patient.

Implementation

10. For frozen ice pack:

    a. Place in appropriate covering material.

11. For ice bag filled with ice:

    a. Place ice in basin or suitable container.

    b. Use scoop other than scoop used to fill pitchers for drinking water.

CAUTION!

CONTAMINATION POSSIBLE. Drinking water may be contaminated if ice pack scoop is used to fill pitchers. USE PAPER CUP OR DESIGNATED SCOOP TO FILL ICE PACKS.

---

    c. Fill ice container 1/2 to 2/3 full.

    d. Remove air from container by squeezing bag just above ice.

    NOTE: Air adds excess weight to the container and keeps the application from following the contours of the body and remaining in place.

    e. Fasten container in suitable manner.

    f. Apply appropriate covering material.

12. Position patient for application of ice pack.

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

13. Place ice pack in appropriate position for therapeutic effect.

14. Place call light within easy reach.

15. Check position of pack and condition of patient's skin at frequent intervals during time of application.

16. Remove at end of designated time or replenish when no longer cold.

    NOTE: Gel-filled frozen packs can be reused, but they should be cleaned with an appropriate disinfectant before refreezing.

Evaluation

17. Evaluate according to following criteria:

    a. Skin is cool and somewhat pale, but not mottled or blue.

    b. Patient does not experience any numbness or burning sensation.

    c. Skin quickly returns to normal color.

Documentation

18. Record:

    a. Type of application.

    b. Site of application.

    c. Length of application.

    d. Condition of skin prior to application.

    e. Condition of skin after application.

    f. Any complaints of patient.

APPLY HEAT AND COLD APPLICATIONS

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Refer to Instructional Supplement for Job Sheet 3.

JOB SHEET 7 — APPLY HEAT AND COLD APPLICATIONS — XIII

OBJECTIVE 9g

Apply a chemical cold pack.

INTRODUCTION

Chemical cold packs, like chemical hot packs are commercially prepared in a variety of sizes to be available when needed and applied with a minimum of effort. They are especially useful since cold is so frequently used as a first-aid measure.

EQUIPMENT AND SUPPLIES

- Chemical cold pack
- Covering

NOTE: Some have covering material included such as a pack designed especially for the perineal area. A towel or washcloth may be used if covering material is not a part of the pack. Disposable coverings are also available.

PROCEDURE

Functional Reading Skills
- Interpret forms and records
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Assess skin at site of application.
2. Assess circulatory status at site of application.
3. Assess sensation at site of application.
4. Assess patient's ability to communicate discomfort.
5. Note any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Gather equipment.
8. Check manufacturer's instructions for activating cold.
9. Check surface of pack for any leaks.

CAUTION!

BURN POSSIBLE. Chemicals in pack can burn patient's skin. CHECK PACK FOR LEAKS.

10. Provide privacy.

11. Explain procedure to patient.

Implementation

12. Position patient for application of pack.

13. Activate pack according to manufacturer's directions (Striking, kneading, snapping, etc.).

14. Apply covering if applicable.

15. Place in appropriate position for therapeutic effect.

16. Place call light within easy reach.

17. Check position of pack and condition of patient's skin frequently during the time of application.

18. Remove at end of designated time.

NOTE: Packs maintain cold for various periods of time. A replacement pack may be needed if cold is not maintained for the length of time ordered.

Evaluation

19. Evaluate according to following criteria:
    a. Skin is cool and somewhat pale, but not mottled or blue.
    b. Patient does not experience any numbness or burning sensation.
    c. Skin quickly returns to normal color.

Documentation

20. Record:
    a. Type of application.
    b. Site of application.

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/patients

c. Length of application.

d. Condition of skin prior to application.

e. Condition of skin after application.

f. Any complaints of patient.

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INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 7

Refer to Instructional Supplement for Job Sheet 1.

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JOB SHEET 8 APPLY HEAT AND COLD APPLICATIONS XIII

OBJECTIVE 9h **Apply a cold, moist compress.**

INTRODUCTION

Cold, moist compresses might be applied in connection with an injury to prevent edema. It is possible that sterile compresses would be used, but the majority of cold compresses would require only clean technique.

Compress material could include gauze, wash cloths, or towels. In the event a sterile compress is needed, sterile dressing material would be used. The material chosen should suit the area to be covered.

EQUIPMENT AND SUPPLIES

- Appropriate compress material
- Basin filled with water and ice at 50-65 degrees °F.
- Bath thermometer
- Water-proof material

NOTE: Plastic wrap or disposable underpads may be used.

PROCEDURE

Assessment and Analysis

1. Assess skin at site of application.
2. Assess circulatory status at site of application.
3. Assess sensation at site of application.
4. Assess patient's ability to communicate discomfort.
5. Note any medical or nursing diagnoses which would alter procedure.

Planning

6. Wash hands.
7. Gather equipment.

Implementation

8. Position patient for application of compress.
9. Place waterproof material under site for compress.

Reading Comprehension Skills
- Gain factual information

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use Scientific instruments (thermometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

10. Place dressing material in prescribed solution.
11. Wring compress material and place on site, observing patient's reaction to application.
12. Cover with waterproof material.
13. Reapply compress as needed to maintain cold.

    NOTE: This will probably be every 5-10 minutes.
14. Continue for prescribed time.

Evaluation

15. Evaluate according to following criteria:
    a. Skin is cool and slightly pale, but not mottled or blue.
    b. Patient does not experience any numbness or burning sensation.
    c. Skin quickly returns to normal color.

Documentation

16. Record:
    a. Type of application.
    b. Site of application.
    c. Length of application.
    d Condition of skin prior to application.
    e. Condition of skin after application.
    f. Any complaints of patient.

Job Acquisition/ Development Skills

- Master specific job task/procedure
- Apply safety practices/processes
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 8

Refer to Instructional Supplement for Job Sheet 3.

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JOB SHEET 9

APPLY HEAT AND COLD APPLICATIONS

OBJECTIVE 9i

Give a tepid sponge bath.

INTRODUCTION

A tepid sponge bath is an intervention for relieving an elevated temperature. The temperature for the bath is tepid rather than cold to prevent shivering. Shivering raises body temperature rather than lowering it. The temperature of the water can be gradually lowered to the cool range after sponging begins.

NOTE: Alcohol in the water will increase evaporation and aid in cooling, but it is also drying to the skin.

EQUIPMENT AND SUPPLIES

- Bath basin filled with tepid water (80-93 degrees °F.)
- Bath thermometer
- Washcloths
- Towels
- Bath blanket
- Waterproof bed protectors
- Clinical thermometer
- Ice pack (optional)

PROCEDURE

Functional Reading Skills
- Interpret forms and records

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Data Analysis and Display Skills
- Collect/record data

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Assess body temperature.
2. Assess pulse rate.
3. Assess patient's ability to cooperate in procedure.
4. Note any medical or nursing diagnoses which would alter or contraindicate procedure.

Planning

5. Wash hands.
6. Gather all equipment.
7. Explain procedure to patient.
8. Provide privacy.

General Science Skills
- Use Scientific instruments (thermometer)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Apply questioning techniques
- Analyze/apply non-verbal communication
- Communication with clients/customers/patients

Implementation

9. Place waterproof bed protectors under patient.

10. Replace top covers with bath blanket.

11. Remove gown.

12. Place ice pack on head if desired.

13. Apply wet washcloths to axillae and groin.

    NOTE: Blood vessels are close to the surface here, enhancing the effect on the circulating blood. The washcloths will have to be reapplied about every five minutes.

14. Sponge each extremity about five minutes each.

    NOTE: When the nurse begins a sponge bath, it must be continued for 20 to 30 minutes. Shorter time periods may actually raise the temperature. An irregular pulse rate or shivering indicates that the nurse must discontinue the bath.

15. Dry each extremity after sponging by patting dry or cover lightly and allow moisture to dry by evaporation.

CAUTION!
TEMPERATURE ELEVATION POSSIBLE. Rubbing creates friction and raises body temperature. SPONGE OR PAT DRY. COVER LIGHTLY SO MOISTURE EVAPORATES.

16. Sponge back and buttocks about five minutes.

CAUTION!
CHILLING POSSIBLE. Sponging chest and abdomen causes chilling. DO NOT SPONGE CHEST AND ABDOMEN

General Relating Skills
- Analyze/apply non-verbal communication
- Interact with clients/customers

Leadership/Influencing Skills
- Obtain confidence of others
- Develop esteem of self/others

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients/ patients

17. Re-check temperature and pulse after 15 minutes and again at conclusion of sponging.

18. Remove all wet linen and bed protectors.

19. Replace gown and top linen.

20. Return all equipment to designated area.

21. Wash hands.

22. Recheck temperature 30 minutes after completion of procedure.

Evaluation

23. Evaluate according to following criteria:

    a. Temperature showed some decrease.

    b. Pulse remained regular.

    c. No chilling occurred.

    d. Patient did not exhibit any unusual symptoms.

Documentation

24. Record:

    a. Temperature before, during, and after procedure.

    b. Water temperature.

    c. Length of time for procedure.

    d. Any unwanted reactions of patient such as chilling or pulse irregularities.

APPLY HEAT AND COLD APPLICATIONS

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 9

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task:

READING SKILLS

— Interpreting forms and records

WRITING SKILLS

— Completing forms and records

MATHEMATICS

— Using English and metric measures

— Collecting and recording data

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (thermometer)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION

— Applying active listening skills

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- Giving/following oral directions
- Applying/analyzing non-verbal communication
- Communicating with client/customer

INTERPERSONAL OR RELATING

- Analyzing/applying non-verbal communication
- Interacting with client/customer
- Obtaining confidence of others
- Developing esteem in self/others

EMPLOYABILITY

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with client/customer

- If students have difficulty collecting and recording data, stress the importance of accuracy in recording data.
- For other suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheets 1 and 3.

PRACTICAL TEST 1

APPLY HEAT AND COLD APPLICATIONS XIII

JOB SHEET 1

Apply a chemical hot pack.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	_____	_____
2. Assessed circulatory status at site of application.	_____	_____
3. Assessed sensation at site of application.	_____	_____
4. Assessed patient's ability to communicate discomfort.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered equipment.	_____	_____
8. Checked manufacturer's instructions for activating heat.	_____	_____
9. Checked surface of pack for any leaks.	_____	_____
10. Provided privacy.	_____	_____

	YES	NO
11. Explained procedure to patient.	____	____
12. Positioned patient for application.	____	____
13. Activated pack according to manufacturer's directions.	____	____
14. Applied covering if applicable.	____	____
15. Placed in appropriate position for therapeutic effect.	____	____
16. Placed the call light within easy reach.	____	____
17. Checked position of pack and condition of patient's skin frequently during time of application.	____	____
18. Removed at end of designated time.	____	____
19. Evaluated according to established criteria.	____	____
20. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ________________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

_______________ (Date)

_______________ (Evaluator's Signature)

_______________ (Evaluator's Position)

PRACTICAL TEST 2

APPLY HEAT AND COLD APPLICATIONS

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JOB SHEET 2

Use an aquathermia pad.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	_____	_____
2. Assessed circulatory status at site of application.	_____	_____
3. Assessed sensation at site of application.	_____	_____
4. Assessed patient's ability to communicate discomfort.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered equipment.	_____	_____
8. Checked electrical parts of unit for safety.	_____	_____
9. Checked pad for any punctures.	_____	_____
10. Checked temperature setting on control unit.	_____	_____

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	YES	NO
11. Filled control unit 2/3 full of distilled water.		
12. Covered non-disposable pad with appropriate covering.		
13. Provided privacy.		
14. Explained procedure to patient.		
15. Positioned patient for application of pad.		
16. Placed pad on indicated area.		
17. Secured with gauze, ties, or tape.		
18. Placed call light within easy reach.		
19. Checked position of pad and condition of patient's skin frequently during time of application.		
20. Removed at end of designated time.		
21. Evaluated according to established criteria.		
22. Documented appropriately.		

EVALUATOR'S COMMENTS

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PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 3

APPLY HEAT AND COLD APPLICATIONS

XIII

JOB SHEET 3

Apply a warm, wet compress.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	_____	_____
2. Assessed circulatory status at site of application.	_____	_____
3. Assessed sensation at site of application.	_____	_____
4. Assessed patient's ability to communicate discomfort.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered equipment.	_____	_____
8. Provided privacy.	_____	_____
9. Explained procedure to patient.	_____	_____
10. Positioned patient for application of compress.	_____	_____

		YES	NO
11.	Placed waterproof material under site for compress.	____	____
12.	For sterile compresses:		
	a. Applied clean gloves to remove any dressing present.	____	____
	b. Removed gloves and washed hands.	____	____
	c. Opened sterile packets. If using sterile gauze squares, placed into sterile solution in sterile basin.	____	____
	d. Applied sterile gloves.	____	____
	e. Wrung sterile compress material and placed over affected area, observing patient for reaction to heat.	____	____
	f. Covered with dry sterile dressing.	____	____
13.	For non-sterile compresses:		
	a. Placed dressing material in prescribed solution.	____	____
	b. Wrung compress material and placed on site, observing patient's reaction to application.	____	____
	c. Covered with waterproof material.	____	____
14.	Reapplied compress as necessary to maintain heat.	____	____
15.	Continued for prescribed time.	____	____
16.	Evaluated according to established criteria.	____	____
17.	Documented appropriately.	____	____

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Chose appropriate compress material	4	3	2	1
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1800

PRACTICAL TEST 4

APPLY HEAT AND COLD APPLICATIONS

XIII

JOB SHEET 4

Assist with a soak/whirlpool.

STUDENT'S NAME ____________________ DATE _____________

EVALUATOR'S NAME __________________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	____	____
2. Assessed circulatory status at site of application.	____	____
3. Assessed sensation at site of application.	____	____
4. Assessed patient's ability to communicate discomfort.	____	____
5. Noted any medical or nursing diagnoses which would alter procedure.	____	____
6. Washed hands.	____	____
7. Gathered equipment.	____	____
8. Cleaned container with disinfectant.	____	____
9. Provided privacy.	____	____
10. Explained procedure to patient.	____	____
11. Added water or other prescribed solution.	____	____

1801

	YES	NO
12. Placed extremity in solution, checking patient's reaction to temperature.	_____	_____
13. Covered container with towel to help retain heat.	_____	_____
14. If whirlpool was used, followed manufacturer's instructions to begin agitation.	_____	_____
15. If solution became too cool, removed extremity, poured out some of the solution and replaced with warmer solution to return to desired temperature.	_____	_____
16. Continued soak for prescribed period of time.	_____	_____
17. Removed extremity from solution and patted dry with towels.	_____	_____
18. Assisted patient with replacement of clothing.	_____	_____
19. Assisted patient to comfortable position with call light within easy reach.	_____	_____
20. Emptied solution from soak container and cleaned container with disinfectant.	_____	_____
21. Returned all equipment to designated area.	_____	_____
22. Evaluated according to established criteria.	_____	_____
23. Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ____

____

1802

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Chose appropriate type and size container	4	3	2	1
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1
Operated equipment correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1804

PRACTICAL TEST 5

APPLY HEAT AND COLD APPLICATIONS

XIII

JOB SHEET 5

Give a sitz bath.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	_____	_____
2. Assessed circulatory status at site of application.	_____	_____
3. Assessed sensation at site of application.	_____	_____
4. Assessed patient's ability to communicate discomfort.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered equipment.	_____	_____
8. Cleaned sitz tub with disinfectant solution.	_____	_____
9. Adjusted room temperature as possible for patient's comfort.	_____	_____

1805

	YES	NO
10. Explained procedure to patient.	____	____
11. Provided privacy by placing sign on door of tub room or bathroom.	____	____
12. Assisted with removal of any dressings or perineal pads, wearing clean gloves and disposing of dressing material in appropriate manner.	____	____
13. For sitz tub:		
a. Filled sitz tub with water at 100-105 degrees °F.	____	____
b. Assisted patient with removing clothing except for hospital gown.	____	____
c. Assisted patient into sitz tub, holding gown so it did not get wet.	____	____
d. Provided towels as padding for legs, sacrum, and back as needed for patient's comfort.	____	____
14. For sitz basin:		
a. Raised toilet seat.	____	____
b. Placed basin over toilet bowl with opening for overflow toward front of bowl.	____	____
c. Closed clamp on tubing.	____	____
d. Filled basin and reservoir bag with water at 100-105 degrees °F.	____	____

		YES	NO
e.	Hung bag 12 inches above level of basin and fit tubing into groove in basin.		
f.	Adjusted clamp for slow release of water into basin.		
g.	Assisted patient to sit in the sitz bath, holding gown so it did not get wet.		
15.	Covered shoulders with bath blanket if patient was cold.		
16.	Placed call light within easy reach.		
17.	Returned frequently to check on patient while in sitz bath.		
18.	At end of prescribed time, assisted patient from tub.		
19.	Assisted patient to dry area and dress in dry clothing. Reapplied any dressing or perineal pads using appropriate technique.		
20.	Assisted patient to return to bed and left comfortable with call light within easy reach.		
21.	Drained sitz tub and cleaned with disinfectant or cleaned sitz basin and stored in appropriate area.		
22.	Disposed of all linens in designated area.		
23.	Washed hands.		
24.	Evaluated according to established criteria.		
25.	Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 6

APPLY HEAT AND COLD APPLICATIONS

XIII

JOB SHEET 6

Apply an ice pack.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	_____	_____
2. Assessed circulatory status at site of application.	_____	_____
3. Assessed sensation at site of application.	_____	_____
4. Assessed patient's ability to communicate discomfort.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered equipment.	_____	_____
8. Provided privacy.	_____	_____
9. Explained procedure to patient.	_____	_____

	YES	NO
10. For frozen ice pack:		
a. Placed in appropriate covering material.	____	____
11. For ice bag filled with ice:		
a. Placed ice in basin or suitable container.	____	____
b. Used scoop other than scoop used to fill pitchers for drinking water.	____	____
c. Filled ice container 1/2 to 2/3 full.	____	____
d. Removed air from container by squeezing bag just above ice.	____	____
e. Fastened container in suitable manner.	____	____
f. Applied appropriate covering material.	____	____
12. Positioned patient for application of ice pack.	____	____
13. Placed ice pack in appropriate position for therapeutic effect.	____	____
14. Placed call light within easy reach.	____	____
15. Checked position of pack and condition of patient's skin at frequent intervals during time of application.	____	____
16. Removed at end of designated time or replenished when no longer cold.	____	____
17. Evaluated according to established criteria.	____	____
18. Documented appropriately.	____	____

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Selected appropriate container	4	3	2	1
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 —	Skilled — Can perform job with no additional training.
3 —	Moderately skilled — Has performed job during training program; limited additional training may be required.
2 —	Limited skill — Has performed job during training program; additional training is required to develop skill.
1 —	Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1813

PRACTICAL TEST 7

APPLY HEAT AND COLD APPLICATIONS

XIII

JOB SHEET 7

Apply a chemical cold pack.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	_____	_____
2. Assessed circulatory status at site of application.	_____	_____
3. Assessed sensation at site of application.	_____	_____
4. Assessed patient's ability to communicate discomfort.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered equipment.	_____	_____
8. Checked manufacturer's instructions for activating cold.	_____	_____
9. Checked surface of pack for any leaks.	_____	_____
10. Provided privacy.	_____	_____

1814

	YES	NO
11. Explained procedure to patient.	____	____
12. Positioned patient for application of pack.	____	____
13. Activated pack according to manufacturer's directions.	____	____
14. Applied covering if applicable.	____	____
15. Placed in appropriate position for therapeutic effect.	____	____
16. Placed call light within easy reach.	____	____
17. Checked position of pack and condition of patient's skin frequently during the time of application.	____	____
18. Removed at end of designated time.	____	____
19. Evaluated according to established criteria.	____	____
20. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 8

APPLY HEAT AND COLD APPLICATIONS

XIII

JOB SHEET 8

Apply a cold, moist compress.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed skin at site of application.	_____	_____
2. Assessed circulatory status at site of application.	_____	_____
3. Assessed sensation at site of application.	_____	_____
4. Assessed patient's ability to communicate discomfort.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Washed hands.	_____	_____
7. Gathered equipment.	_____	_____
8. Positioned patient for application of compress.	_____	_____
9. Placed waterproof material under site for compress.	_____	_____

	YES	NO
10. Placed dressing material in prescribed solution.	____	____
11. Wrung compress material and place on site, observing patient's reaction to application.	____	____
12. Covered with waterproof material.	____	____
13. Reapplied compress as needed to maintain cold.	____	____
14. Continued for prescribed time.	____	____
15. Evaluated according to established criteria.	____	____
16. Documented appropriately.	____	____

EVALUATOR'S COMMENTS

____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Chose appropriate compress material	4	3	2	1
Used equipment proficiently	4	3	2	1
Completed procedure correctly	4	3	2	1

1818

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

________________ ______________________________
(Date) (Evaluator's Signature)

____
(Evaluator's Position)

1819

PRACTICAL TEST 9

APPLY HEAT AND COLD APPLICATIONS

JOB SHEET 9

Give a tepid sponge bath.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed body temperature.	_____	_____
2. Assessed pulse rate.	_____	_____
3. Assessed patient's ability to cooperate in procedure.	_____	_____
4. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
5. Washed hands.	_____	_____
6. Gathered equipment.	_____	_____
7. Explained procedure to patient.	_____	_____
8. Provided privacy.	_____	_____
9. Placed waterproof bed protectors under patient.	_____	_____
10. Replaced top covers with bath blanket.	_____	_____

	YES	NO
11. Removed gown.		
12. Placed ice pack on head if desired.		
13. Applied wet washcloths to axillae and groin.		
14. Sponged each extremity about five minutes each.		
15. Dried each extremity after sponging by patting dry or covering lightly and allowed moisture to dry by evaporation.		
16. Sponged back and buttocks about five minutes.		
17. Rechecked temperature and pulse after 15 minutes and again at conclusion of sponging.		
18. Removed all wet linen and bed protectors.		
19. Replaced gown and top linen.		
20. Returned all equipment to designated area.		
21. Washed hands.		
22. Rechecked temperature 30 minutes after completion of procedure.		
23. Evaluated according to established criteria.		
24. Documented appropriately.		

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Selected appropriate equipment	4	3	2	1
Completed appropriate procedure proficiently	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

____________ ________________________
(Date) (Evaluator's Signature)

____
(Evaluator's Position)

1822

WRITTEN TEST

APPLY HEAT AND COLD APPLICATIONS

XIII

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with application of heat and cold to their definitions. Write the correct letter in the blank.

______1. Production of purulent material

______2. Interruption of blood supply

______3. Temperature slightly below body temperature

______4. Increase in size of blood vessel

______5. Material used to apply moist heat or cold

______6. Decrease in size of blood vessel

______7. Softening by contact with moisture

a. Compacts

b. Compress

c. Exudation

d. Irrigation

e. Ischemia

f. Maceration

g. Pusculence

h. Sitz bath

i. Suppuration

j. Tepid

k. Vasoconstriction

l. Vasodilation

m. Vasocompres-sion

OBJECTIVE 2

Distinguish between the effects of heat and cold applications. Write an "H" before an effect of a heat application and a "C" before effects of cold applications. If both heat and cold produce the effect, write "H," "C" in the blank.

______1. Prevents edema

______2. Vasodilation

______3. Control bleeding

______4. Increases suppuration

______5. Reduces muscle tension

______6. Produces local anesthesia

______7. Increases the blood supply to an area

______8. Increases the removal of waste products

______9. Decreases cell metabolism

______10. Increases the supply of oxygen and nutrients

OBJECTIVE 3

Distinguish between the effects of moist and dry applications. Write an "M" before the effects of moist applications and a "D" before the effects of dry applications.

______1. Penetrates more deeply

______2. Can cause maceration of the skin

______3. Retains temperature longer

______4. Greater risk for burns with heat applications

______5. Can cause drying of the skin

______6. Conforms better to the shape of the body

______7. Softens wound exudate

______8. Heat more likely to lead to sweating

OBJECTIVE 4

Choose patients at risk for application of heat and cold. Write an "X" before patients at increased risk for heat and cold applications.

______1. A 30 year old man who is unconscious

______2. A 16 year old male with a leg in a cast

______3. A 23 year old female with a sprained ankle who has just delivered a baby

______4. A 90 year old male who lives in a nursing home

______5. A 10 year old who has an eye infection

______6. A 55 year old male who has arthritis

______7. A 32 year old female with diabetes

______8. A 72 year old female who has had a stroke

OBJECTIVE 5

Choose the correct word or phrase to complete statements about safety guidelines for the application of heat and cold. Write the correct letter in the blank.

______1. The nurse can do the most to assure safety during heat and cold applications by ______.

a. limiting applications to 10 minutes
b. alternating heat and cold applications
c. checking equipment carefully before application
d. assessing vital signs frequently during application

______2. Ms. Salazar has an aquathermia pad to her leg. Shortly after it is placed on the leg, she says it is cooling off and not working. The most appropriate action for the nurse would be to ______.

a. increase the temperature setting on the control unit
b. call the doctor for an order to increase the temperature
c. explain the ability of the nerve receptors to adapt to heat
d. remove the pad since it is not doing any good

______3. When heat applications are removed, the skin should ______.

a. appear red and feel hot
b. appear mottled
c. show decreased capillary refill and sensation
d. return to normal color in a short time

______4. The nurse should be concerned when cold applications are removed if the patient complains of ______.

a. burning
b. itching
c. nausea
d. fatigue

______5. Before applying heat or cold applications the nurse should ______.

a. question the patient about allergies
b. assess circulation at the site
c. give the patient a pain medication
d. apply sterile gloves

OBJECTIVE 6

Match types of heat applications to their descriptions. Write the correct letter in the blank.

______1. Application of warm, wet material

______2. Application of heat to the perineal area

______3. Heating unit with reservoir and pad filled with channels for circulating fluid

______4. Heat produced by kneading, snapping or striking a commercially prepared product

______5. Immersion of extremity in water

a. Aquathermia pack
b. Aquathermia pad
c. Chemical hot pack
d. Dry heat pad
e. Sitz bath
f. Soak/whirlpool
g. Warm, wet compress

OBJECTIVE 7

Match types of cold applications to their descriptions. Write the correct letter in the blank.

______1. Intervention to reduce temperature

______2. Rubber or vinyl container filled with ice or gel

______3. Various materials immersed in ice water before application

______4. Cold produced by kneading, snapping or striking a commercially prepared product

a. Chemical cold pack

b. Cold, moist compress

c. Cool or tepid sponge bath

d. Sitz bath

e. Hypothermic pack

f. Ice pack

OBJECTIVE 8

Match temperature conditions to their corresponding temperature ranges. Write the correct letter in the blank.

______1. Cold

______2. Cool

______3. Hot

______4. Tepid

______5. Very cold

______6. Very hot

______7. Warm and neutral

a. 80-93 degrees °F.

b. 90-95 degrees °F.

c. Below 50 degrees °F.

d. 63-85 degrees °F.

e. 98-105 degrees °F.

f. Below 45 degrees °F.

g. 65-80 degrees °F.

h. 105-115 degrees °F.

i. 93-98 degrees °F.

j. 50-65 degrees °F.

k. 95-100 degrees °F.

l. 115-120 degrees °F.

NOTICE The following job sheets are not part of the Written Test. If these activities have not been completed, check with your instructor.

OBJECTIVE 9 **Demonstrate the ability to:**

a. **Apply a chemical hot pack.** RATING______

b. **Use an aquathermia pad.** RATING______

c. **Apply a warm, wet compress.** RATING______

d. **Assist with a soak/whirlpool.** RATING______

e. **Give a sitz bath.** RATING______

f. **Apply an ice pack.** RATING______

g. **Apply a chemical cold pack.** RATING______

h. **Apply a cold, moist compress.** RATING______

i. **Give a tepid sponge bath.** RATING______

WRITTEN TEST ANSWERS

APPLY HEAT AND COLD APPLICATIONS

XIII

OBJECTIVE 1

1. i
2. e
3. j
4. l
5. b
6. k
7. f

OBJECTIVE 2

1. C
2. H
3. C
4. H
5. H
6. C
7. H
8. H
9. C
10. H

OBJECTIVE 3

1. M
2. M
3. D
4. M
5. D
6. M
7. M
8. D

OBJECTIVE 4

1, 4, 5. 7, 8

OBJECTIVE 5

1. c
2. c
3. d
4. a
5. b

OBJECTIVE 6

1. g
2. e
3. b
4. c
5. f

OBJECTIVE 7

1. c
2. f
3. b
4. a

OBJECTIVE 8

1. j
2. g
3. e
4. a
5. c
6. h
7. i

OBJECTIVE 9

Refer to Practical Test ratings for Job Sheets 1-9.

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OBJECTIVE SHEET

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE

XIV

INTRODUCTION

Oxygen is the body's number one need. The respiratory system has much of the responsibility for meeting this need. The nurse must understand how to assess respiratory function and how to provide appropriate intervention when there is a problem. It is knowledge that has the potential to save lives.

UNIT OBJECTIVE

After completing this unit the student should be able to assess the respiratory system, assist in collecting diagnostic data, provide nursing interventions to improve respiratory efficiency, and provide supplemental oxygen. The student will show these competencies by completing job sheets and a written test with a minimum of 85% accuracy.

SPECIFIC OBJECTIVES

After completing this unit, the student will be able to:

1. Match terms associated with respiratory assistance to their correct definitions.
2. List three processes that influence the body's ability to receive oxygen.
3. Select from a list factors that influence the respiration processes.
4. Choose the word or phrase to complete statements about how physical assessment data are used in assessing the adequacy of a patient's respiratory effort.
5. Choose the word or phrase to complete statements about how diagnostic testing data are used in assessing the adequacy of a patient's respiratory effort.
6. Choose the word or phrase to complete statements about how nursing history data are used in assessing the adequacy of a patient's respiratory effort.
7. Match abnormal breathing patterns to their descriptions.
8. Match nursing interventions that increase respiratory efficiency to their goals.

9. Choose the word or phrase to complete statements about nursing interventions that increase respiratory efficiency.

10. Select guidelines for administering oxygen.

11. Match oxygen sources with their descriptions.

12. Match methods of administering oxygen to their descriptions.

13. Demonstrate the ability to:

    a. Collect a throat culture. (Job Sheet 1)

    b. Collect a sputum specimen. (Job Sheet 2)

    c. Assist with/induce deep breathing/coughing exercises. (Job Sheet 3)

    d. Position patient in orthopneic position. (Job Sheet 4)

    e. Suction oronasal tract. (Job Sheet 5)

    f. Use piped-in (wall) oxygen. (Job Sheet 6)

    g. Initiate and maintain an oxygen cylinder. (Job Sheet 7)

    h. Use a nasal cannula. (Job Sheet 8)

    i. Use an oxygen mask. (Job Sheet 9)

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PREPARATION

- Review the unit and plan your presentation.
- Study the specific objectives to determine those you will cover in your presentation. Decide also which objectives should be taught to which students.

  Determine scope and sequence of objectives that you add. Design and develop support materials, including evaluation techniques, for additional objectives.
- Review teaching suggestions and plan classroom activities.
- Determine how you will schedule time for students to demonstrate competence in the required procedures.
- Order materials to supplement unit.
- **HOSA** Integration
  - — Assist students to conduct a chapter service project on respiratory disease.
  - — Develop objectives for service project and identify a theme.
  - — Create a poster according to Extemporaneous Health Display rules—display in highly visible areas.
  - — Plan community or school health project that involves disseminating pamphlets about the effects of smoking.

DELIVERY

Objective 1

- Discuss terms and definitions dealing with respiratory assistance.

Objectives 2-8

- Discuss guidelines for assessing respiratory patterns.
- Show video *Smoking: A Research Update.*

- Discuss student's experiences with risk factors for respiratory problems such as smoking, allergy, occupational hazards, etc.

- Refer students to Supplement 1 on obtaining blood gases.

Objective 9

- Discuss nursing interventions to increase respiratory efficiency.

- Show students an incentive spirometer if one is available.

- Have students discuss any past experiences with pain during deep breathing related to surgical incisions or chest trauma.

- Refer students to Supplement 3 on postural drainage and chest percussion.

  NOTE: If handout on postural drainage and chest percussion is supplied to students, some instruction should be provided on correct technique.

Objective 10

- Discuss guidelines for administration of oxygen.

- Show students flowmeter and humidifier bottles if they are available.

Objective 11

- Discuss sources of oxygen supply.

Objective 12

- Discuss methods of administering oxygen.

- Show devices such as nasal cannula and masks if they are available.

- Show video, *Oxygen Administration*.

- Invite a respiratory therapist to talk to the class about oxygen administration.

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APPLICATION

Objective 13

- Discuss collection of a throat culture.
- Show equipment for collecting a throat culture.
- Have students complete Job Sheet 1.
- Discuss collection of a sputum specimen.
- Show students specimen containers for sputum collection.
- Have students complete Job Sheet 2.
- Discuss deep breathing and coughing exercises.
- Have students practice exercises with one another.
- Have students complete Job Sheet 3.
- Discuss positioning in orthopneic position.
- Have students position one another in orthopneic position.
- Have students complete Job Sheet 4.
- Discuss suctioning of the oronasal tract.
- Show video, *Suctioning*.

  NOTE: All of it is not appropriate at this level. Preview and stop after pharyngeal suctioning. Explain that procedure describes suctioning at pharyngeal level and not tracheal level as video does.

- Have students practice suctioning technique on mannikin.
- Have students complete Job Sheet 5.
- Discuss using piped-in oxygen.
- Have students complete Job Sheet 6.
- Discuss initiating and maintaining an oxygen cylinder.
- Have students complete Job Sheet 7.

- Discuss using a nasal cannula.
- Have students complete Job Sheet 8.
- Discuss using an oxygen mask.
- Have students complete Job Sheet 9.
- Make arrangements for students to spend time with a respiratory therapist and assist with oxygen therapy.

EVALUATION

Pretest

- Pretest qualifying students.
- Determine individual study requirements from pretest results.
- Counsel students individually on pretest results and study requirements.
- Modify materials in unit or create supplementary materials for individual study as required.

Practical Test

- Explain to students that they will be asked to demonstrate procedures on the job sheet to complete the practical test.
- Describe the rating scale used on the practical test.
- Give practical test.
- Reteach and retest as necessary.

Written Test

- Explain to students that they will be asked to demonstrate on the written test actions listed in the specific objectives.
- Give written test.
- Evaluate students on assignment sheet activities (and job sheets if included in unit) if not previously completed.
- Complete appropriate section of competency profiles.

- Review individual and group performance in order to evaluate teaching methods. Adjust scope, sequence, or instructional approaches for additional lessons as required.

SUGGESTED RESOURCES

Audiovisual Materials

- *Suctioning: Nasotracheal, Oropharyngeal and Endotracheal Techniques*, Medcom/Trainex, Box 3225, Garden Grove, CA 92642.
- *Oxygen Administration*, Medcom/Trainex, Box 3225, Garden Grove, CA 92642.
- *Smoking: A Research Update*, Human Relations Media.

UNIT REFERENCES

- Carroll, Patricia. "The Right Way to do Chest Physiotherapy," *RN*, May, 1987, p. 26-29.
- Carroll, Patricia. "Good Nursing Gets COPD Patients Out of Hospitals," *RN*, July, 1989, p. 25-28.
- DeVito, Annette J. and Marlene Kleven. "Dyspnea" *RN*, June 1987, p. 40-45.
- *Illustrated Manual of Nursing Practice*. Springhouse Corporation, Springhouse, Pennsylvania, 1991.
- Kozier, Barbara and Glenora Erb. *Fundamentals of Nursing Concepts and Procedures* (3rd ed). Addison-Wesley Publishing Company, Menlo Park, California, 1987.
- Lewis, LuVerne W. and Barbara K. Timby. *Fundamental Skills and Concepts in Patient Care* (4th ed). J. B. Lippincott Company, Philadelphia, Pennsylvania, 1988.
- Mims, Barbara Clark. "The Risks of Oxygen Therapy," *RN*, July, 1987, p. 20-25.
- Perry, Anne G. and Patricia A. Potter. *Clinical Nursing Skills and Techniques*. The C. V. Mosby Company, St. Louis, Missouri, 1986.
- Podjasek, Jill H. "Which Post-op Patient Faces the Greatest Respiratory Risk?," *RN*, September, 1985, p. 44-53.

- Potter, Patricia A. and Anne G. Perry. *Basic Nursing Theory and Practice*. The C. V. Mosby Company, St. Louis, Missouri, 1987.

- *Procedures*. Intermed Communications, Inc., Springhouse, Pennsylvania, 1983.

- *Providing Respiratory Care*. Intermed Communications, Inc., Horsham, Pennsylvania, 1979.

- Rosdahl, Caroline Bunker, *Textbook of Basic Nursing* (4th ed). J. B. Lippincott Company, Philadelphia, Pennsylvania, 1985.

- Sloan, Jamee Reid. *Practical Nursing-Volume 1*. Oklahoma Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, Stillwater, Oklahoma, 1981.

- Spyr, Jean and Mary Ann Preach. "Pulse Oximetry." *RN*, May, 1990, p. 39-45.

- *The Lippincott Manual of Nursing Practice* (5th ed). J. B. Lippincott Company, Philadelphia, Pennsylvania, 1991.

- Timby, Barbara K. *Clinical Nursing Procedures*. J. B. Lippincott Company, Philadelphia, Pennsylvania, 1989.

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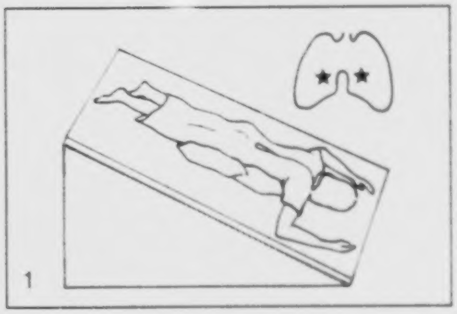
HANDOUT 1

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

The following pictures illustrate positions and the area of the lung which is drained by that position.



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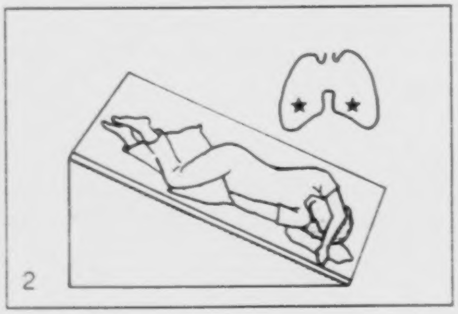

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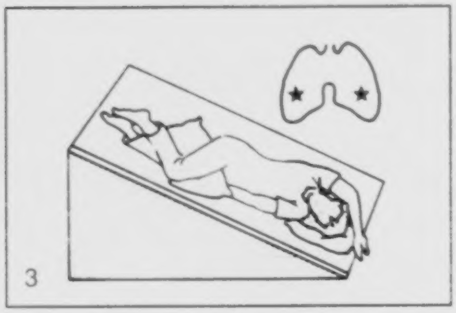

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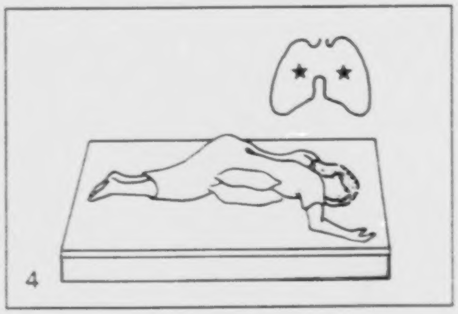

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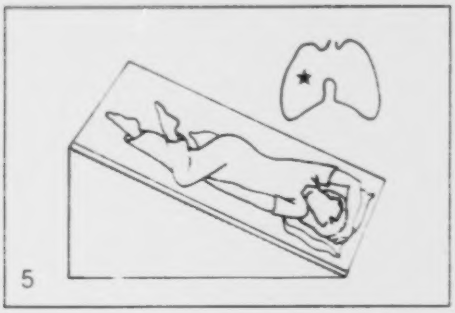
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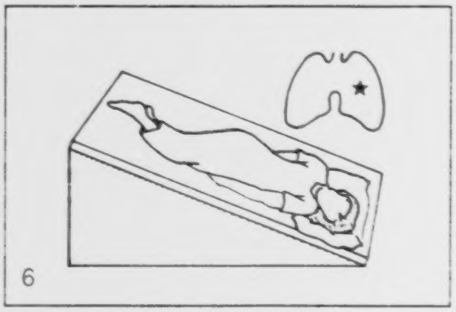
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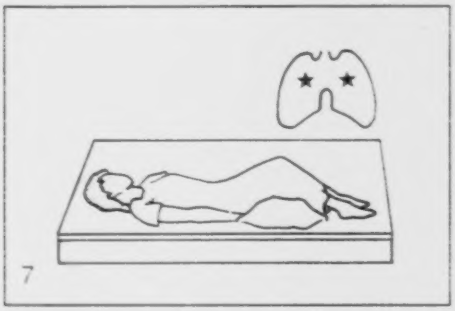
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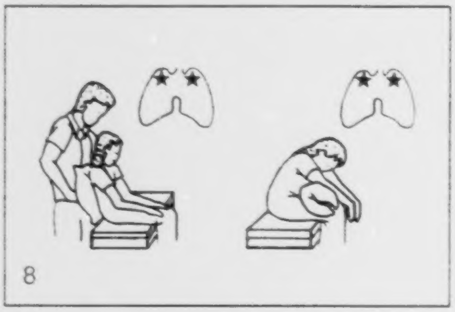
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A hospital bed can aid in assuming many of the positions. An infant or small child can be positioned in the lap. The patient at home can be instructed to hang from the side of the bed and use pillows to assume some positions.

Keep the following in mind when planning for postural drainage.

- Do not perform this procedure immediately after meals.
- Do not position the head downward when there is a head injury, increased intracranial pressure, hiatal hernia or heart disease. This could cause additional damage.
- Do not use the head-down positions if the patient is receiving a tube feeding or has a depressed cough reflex. In these situations there is great danger of aspiration.
- Many patients will receive a medication by inhalation, to dilate and relax the bronchial passages about 30 minutes before the treatment.
- Monitor pulse and respirations during the procedure.

- Encourage the patient to cough to help bring up the secretions. Teach deep breathing and coughing techniques to enhance the procedure.

- Chest percussion aids in loosening thick secretions so the patient can bring them up. The technique can also be called clapping or cupping. Cupping refers to the position of the hand. The flattened hand would be uncomfortable. The cupped hand is more comfortable as well as creating a kind of suction to aid in the treatment.

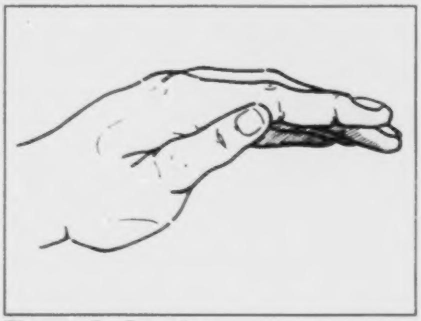

Figure 9 Cupping

The area being drained by the particular position should be percussed. Percussion in each position should last about two minutes. Do not percuss on bare skin or over the breasts. Avoid bony areas such as the sternum, spine, or scapula. Do not percuss if there is any chest injury.

Mechanical percussors or vibrators are available to loosen secretions. Patients may be able to use the vibrators on themselves in some positions.

INFORMATION SHEET

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 1

Match terms associated with respiratory assistance to their correct definitions.

- **Anoxia** — Lack of oxygen
- **Atelectasis** — Collapse of portion of lungs
- **Blood gases** — Determination of levels of gases dissolved in circulating blood
- **Chest percussion** — Technique of using cupped hands over chest to loosen secretions
- **Chronic obstructive pulmonary disease (COPD)** — Any one of a number of progressive lung diseases which interferes with the ventilation function of the lungs
- **Dyspnea** — Difficulty in breathing
- **Expectorate** — To bring up sputum
- **Hemoglobin** — Oxygen-carrying portion of the blood
- **Hemoptysis** — Blood-tinged sputum
- **Hypoxemia** — Deficiency of oxygen in the blood
- **Hypoxia** — Oxygen deficiency
- **Incentive spirometry** — Technique to encourage increased lung expansion by using a device to visually show amount of air moved with inhalation
- **Intermittent positive pressure breathing (IPPB)** — Technique of stimulating more complete lung inflation by using a device to deliver air under pressure
- **Liter flow** — Measure of oxygen delivered
- **Nares** — Nostrils
- **Nasal cannula** — Device for delivering oxygen, consists of short prongs which fit into the nares

- **Orthopnea** — Difficulty in breathing except in the upright position

- **Postural drainage** — Series of positions to stimulate drainage of secretions from all portions of the lungs

- **Pulmonary** — Pertaining to the lungs

- **Pulmonary function tests** — Measurement of air moved by the lungs at various points of respiration

- **Retractions** — Abnormal respiratory pattern demonstrated by a fall of soft tissue around bony areas

- **Sputum** — Secretion of the respiratory tract

- **Stertor** — Deep, snoring-type respiratory noise caused by partial obstruction of upper airways

- **Stridor** — High pitched, crowing-type respiratory noise caused by obstruction at the larynx

- **Suctioning** — Removal of fluids by mechanical means

- **Ventilation** — Transfer of air between lungs and the environment

- **Venturi mask** — Type of oxygen delivery which delivers precise concentrations of oxygen

OBJECTIVE 2

List three processes that influence the body's ability to receive oxygen.

Since oxygen is vital to life, the nurse must understand the process involved in obtaining an oxygen supply. Then the nurse must be able to detect any changes which would alter respiratory efficiency.

Three important processes influence the body's ability to receive oxygen. They are:

- Pulmonary ventilation or the transfer of air between the lungs and the environment

- Exchange of oxygen and carbon dioxide between the pulmonary capillaries and the alveoli

- Transportation by the blood of oxygen to and carbon dioxide from all cells

OBJECTIVE 3

Select from a list factors that influence the respiration processes.

In order for the respiratory processes to function adequately, the individual needs:

- An adequate oxygen supply
- An open airway
- Healthy lung tissue
- Intact chest cavity
- Sufficient nerve and chemical control of respiration
- Adequate red blood cells and hemoglobin
- Healthy heart
- Adequate circulation

In assessing the adequacy of the respiratory effort, the nurse would consider data obtained by physical assessment, diagnostic testing, and the nursing history. The patient's activities of daily living, obtained by history, can be very important in assessing actual or potential respiratory problems.

OBJECTIVE 4

Choose the word or phrase to complete statements about how physical assessment data are used in assessing the adequacy of a patient's respiratory effort.

Physical assessment data includes:

- **Assessment of respirations,** noting
  - Rate
  - Rhythm
  - Depth

  Alterations of any of these could indicate difficulty in obtaining sufficient amounts of oxygen. Combinations of these factors could indicate the respiratory patterns known as:

  Hyperventilation
  Hypoventilation
  Tachypnea

Bradypnea
Cheyne-Stokes respirations
Dyspnea
Apnea

— Other factors such as:

  ^ Skin color

    Cyanosis is a bluish discoloration of skin, lips, or nail beds indicating inadequate oxygenation

  ^ Movements associated with respirations

    Respiratory movements such as flaring of the nares, use of abdominal or neck muscles, asymmetrical movements or retractions indicate dyspnea. Retractions refer to a fall of soft tissue around bony areas. Intercostal retractions would refer to a fall of tissue between the ribs.

  ^ Noise associated with respirations

    — Stertor — Deep, snoring-type noise associated with partial obstruction of upper respiratory airways

    — Stridor — High-pitched, crowing-type sound associated with obstruction at the larynx

    — Wheeze — Whistling-type sound associated with narrowing of bronchial tree

  ^ Anxiety level — Anxiety or restlessness often signals inadequate oxygen levels

- **Auscultation of breath sounds,** noting

— Equality of sound on right and left sides

— Any areas of diminished sounds

— Any adventitious sounds

  ^ Crackles

    - Rhonchi
    - Wheezes
    - Pleural friction rubs

- **Chest shape**

  Chest shape can indicate respiratory disease such as the barrel chest associated with emphysema. Chest shape can also limit chest expansion.

- **Position assumed by patient**

  The patient may assume a position to maximize respiratory effort. Orthopnea refers to the inability to breathe except in the upright position. Patients with chronic respiratory disease tend to lean forward with the arms abducted from the sides to ease breathing.

- **Cough**, noting

  - Frequency

    This could include noting that the cough only occurred when the patient first assumed an upright position or that it continued regardless of position or activity.

  - Productive or non-productive

    Material brought up from the respiratory system is called sputum. Sputum should be described in regard to amount, color, consistency, and odor. When sputum containing blood is produced, it is called hemoptysis. The word *copious* is often used to describe a large amount of sputum and *tenacious* describes sputum which is sticky in consistency.

- **Pulse**, noting

  - Rate
  - Rhythm
  - Volume

All of these assessments could indicate heart disease which alters respiratory efficiency. Respiratory problems also increase the pulse rate making this an important assessment factor.

- **Weight**, noting
  - Obesity
  - Emaciation

  Both conditions put patients at increased respiratory risk. This is especially true of the patient undergoing a general anesthesia.

OBJECTIVE 5

Choose the word or phrase to complete statements about how diagnostic testing data are used in assessing the adequacy of a patient's respiratory effort.

The nurse should also consider data obtained from diagnostic tests when assessing the adequacy of a patient's respiratory effort.

Important diagnostic data could include:

- **Chest X-ray** — Allows for visualization of the lungs and bony structure of the chest
- **Pulmonary function testing** — Determines the ability of the lungs to move air in and out of the respiratory system
- **Blood gases** — Assesses the amount of various gases such as oxygen and carbon dioxide present in blood
- **Pulse oximetry** — Gives an estimation of oxygen saturation, but without drawing blood. A clip-on device uses light rays to estimate oxygen carried by hemoglobin.
- **Complete blood count including:**
  - Red blood cell count — necessary for carrying oxygen
  - White blood cell count — indicator of infection
  - Hemoglobin — oxygen carrying part of blood

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- **Throat culture** — Identifies organisms in the pharynx
- **Sputum specimen** — Usually obtained for culture to identify organisms in the respiratory structures
- **Other visualization procedures**, such as bronchoscopy or lung scan — Allows more detailed observation of respiratory structures
- **TB skin testing** — Determines exposure to the organism causing tuberculosis

OBJECTIVE 6

Choose the word or phrase to complete statements about how nursing history data are used in assessing the adequacy of a patient's respiratory effort.

The patient's activities of daily living, obtained by history, can be very important in assessing actual or potential respiratory problems.

The history should include:

- **Past diseases involving the heart and lungs**

  Many lung diseases are chronic. Others leave lung tissue weakened. The heart is essential for adequate oxygenation.

- **Age**

  The elderly are at increased risk for respiratory problems.

- **Occupational activities**

  Occupations coming into contact with dust or toxic materials put a person at risk for respiratory problems. Mining, milling operations, and farming are examples.

- **Smoking**

  Smokers are at increased risk for respiratory problems. Families of smokers also have a great risk. Information should include tobacco product used, amount used, length of time it has been used. Former smokers should indicate length of time since smoking has ceased.

- **Limitation or alteration in activities due to respiratory problem**

  Patients may no longer be able to care for themselves or their environment or engage in previous activities without shortness of breath.

- **Allergies**

  Many allergies involve the respiratory system. Asthma may have a strong allergic component. Environmental allergens such as dust, plants, or fur usually affect the respiratory system.

- **Pain**

  Pain with respiratory effort should be documented.

- **Usual activities**

  People who spend most of their time sitting or with little activity have increased risk for respiratory problems. Physical activities increase respiratory efficiency.

- **Medications**

  Medications may depress respirations. Medications treating heart problems indicate problems associated with the process of oxygenation.

OBJECTIVE 7

Match abnormal breathing patterns to their descriptions.

Abnormal breathing patterns include:

- **Apnea** — Absence of respirations
- **Bradypnea** — Slow respiratory rate
- **Dyspnea** — Difficulty in breathing
- **Orthopnea** — Difficulty breathing except in upright position
- **Tachypnea** — Rapid respiratory rate

OBJECTIVE 8 | **Match nursing interventions that increase respiratory efficiency to their goals.**

INTERVENTION	GOAL
Coughing	To bring up secretions in the respiratory tree
Deep breathing exercises	To open all airways within lungs
Encourage fluid intake	To liquify secretions
Incentive spirometry	To increase inspiratory effort
Intermittent positive pressure breathing (IPPB)	To promote lung expansion
Oxygen	To supplement available oxygen
Positioning	To promote lung expansion
Postural drainage	To drain secretions from the lungs
Suctioning	To clear secretions from the airway
Turning	To discourage pooling of secretions

OBJECTIVE 9 | **Choose the word or phrase to complete statements about nursing interventions that increase respiratory efficiency.**

The goal of most nursing interventions is aimed at keeping the airway open. Without an open airway, all other interventions are useless. Many times, the airway can become occluded with secretions of the respiratory system. Good nursing care can help minimize and correct this.

- **Fluid intake**

  Encouraging a generous fluid intake is a very simple intervention, but one that can help liquify the mucous secretions of the respiratory system. When the body's fluid reserves are diminished, secretions are likely to become thicker and more difficult to cough up.

- **Deep breathing and coughing exercises**

Deep breathing helps open all the airways within the lungs. Patients sometimes need to be reminded and encouraged to take deep breaths because of pain due to such problems as a surgical incision or broken ribs. The nurse may provide the post-operative patient with a "cough pillow" to splint the incision, reducing pain. A bath blanket placed in a pillow case makes a good cough pillow.

An incentive spirometer is a special aid used to encourage effective inhalations. A variety of products are on the market, but all give the patient some visual indication of the amount of air he is taking into the lungs.

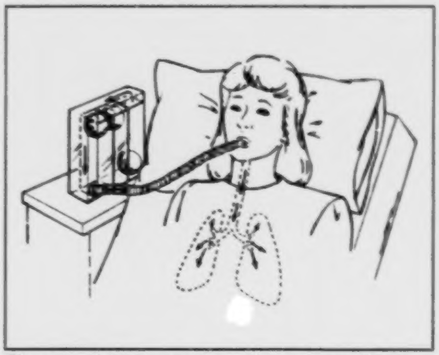

Figure 10 Incentive deep breathing exerciser

Coughing helps bring up secretions in the respiratory tree which could occlude the airway. A cough is a powerful force which should be used to prevent respiratory complications. Deep breathing and coughing are often used together.

- **Turning and positioning**

When a patient is allowed to stay in one position for a long period of time, secretions pool in one area. This encourages the growth of pathogens. Patients should be turned or encouraged to turn at least every two hours. The maximum amount of movement should always be encouraged.

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Adequate positioning also provides for complete lung expansion and will help open all airways within the lungs. Good body alignment and adequate support of limbs helps assure this. Patients with respiratory difficulty may be helped by assuming the orthopneic position.

- **Postural drainage and chest percussion**

  A series of positions may be used to help drain secretions from all areas of the lungs. Patients with some chronic respiratory problems may have to use postural drainage several times a day to aid in keeping an open airway.

  Chest percussion may be used with postural drainage to loosen the secretions and aid in the drainage. Special mechanical vibrators may be used in the hospital to achieve this goal.

- **Intermittent positive pressure breathing (IPPB)**

  In most settings, nurses are not responsible for these treatments, but the nurse should have some understanding of what is accomplished. Air or oxygen is delivered to the lungs at a higher pressure during inspiration to promote complete lung expansion. Secretions can be removed by the coughing which usually follows. Medications are sometimes used in the treatment.

- **Suctioning**

  If patients are not able to remove secretions of the respiratory system by themselves, suctioning may be used. This might be necessary for a weakened or comatose patient when the cough effort is ineffective or not present. A suction catheter is inserted through the mouth or nose to remove secretions in the pharynx. Sometimes suctioning of the trachea is necessary; however, the practical nurse usually does not suction this deeply.

- **Oxygen administration**

  There are times when the patient is not able to obtain adequate oxygen from the atmosphere to maintain oxygenation of all cells. Then one of a number of available methods of oxygen administration must be used.

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OBJECTIVE 10

Select guidelines for administering oxygen.

The air we breathe normally contains about 21% oxygen. When there is a problem affecting the respiratory system or delivery of oxygen, this may not be sufficient to oxygenate all body tissue. An additional supply of oxygen may be needed.

Hypoxemia, or inadequate levels of oxygen in the blood, first produces an increased pulse rate. Rapid, shallow respirations follow. The lack of oxygen to the brain may cause restlessness, anxiety, or disorientation. Extra respiratory effort may be demonstrated by flaring of the nares or retractions. Cyanosis may be evident if the situation continues. These are symptoms that could call for administration of oxygen.

The amount of oxygen administered is expressed in liter flow and percentage of concentration. A flowmeter is the device the nurse uses to determine the rate of oxygen administration. Liter flow from 1 to 15 liters per minute is possible. Various methods of delivery call for different liter flow. In general, the larger the area to be oxygenated, the greater the liter flow. Therefore, an oxygen tent demands a greater liter flow than an oxygen mask. The nasal cannula needs the lowest liter flow.

All methods increase the percentage of oxygen above the 21% normally available. Percentages from 24-100% are possible. The oxygen percentage is ordered to meet the patient's specific needs. Most methods deliver less than a 50% oxygen concentration. **Lung damage can occur with concentrations above 50%.** Cylinder or piped-in oxygen is at 100% concentration. The method of delivery determines the percentage of concentration the patient will receive.

WARNING

LUNG DAMAGE POSSIBLE. Oxygen concentrations above 50% can damage lungs. DO NOT DELIVER OXYGEN AT GREATER THAN 50% CONCENTRATION.

1953

When the oxygen flow rate is greater than three liters per minute, the oxygen is humidified before delivery to prevent drying the mucous membranes. A humidifier is filled with distilled water and attached to the oxygen source. Some administration methods can supply increased humidity. This increased humidity can cause the patient and his bed linens to become wet. The nurse must change the linens to keep the patient comfortable.

Elastic bands around the patient's head hold nasal cannulas and masks in place. The bands can cause pressure areas, particularly over the ears. Careful cleansing of the area and application of padding material will help prevent such problems. The area under masks can also become irritated. Periodic removal and complete cleansing are necessary.

The nurse must make sure that connecting tubing is not kinked or compressed by the weight of the patient. This would impede the flow of oxygen.

Safety is a primary consideration when oxygen is used. Oxygen is a flammable gas, making fires and explosions possible.

WARNING

FIRE-EXPLOSION POSSIBLE. Oxygen is flammable gas.
FOLLOW ALL SAFETY RULES.

- Smoking is prohibited around oxygen. Signs are posted on the door of rooms where oxygen is in use, warning everyone not to smoke.

- Petroleum products are not used around oxygen. This includes petroleum-based products frequently applied to lips.

- Electrical appliances should not be used in the presence of oxygen. This includes electric shavers, hair dryers and radios.

- Wool and synthetic fabrics pose hazards because static electricity can cause sparks that ignite the oxygen. Cotton fabrics are preferable in the presence of oxygen.

The nurse should realize and explain to patients and family that there are dangers in too much oxygen. Patients may increase the flow rate without the nurse's knowledge. Assessment of a patient receiving oxygen should include checking the equipment and liter flow. Oxygen toxicity may include symptoms of chest pain, cough, headache, anorexia, and nausea.

OBJECTIVE 11 **Match oxygen sources with their descriptions.**

When oxygen is used in the hospital, there will probably be a supply built into the hospital and accessed by a wall panel. It is a simple matter to plug in the flow meter and begin oxygen therapy.

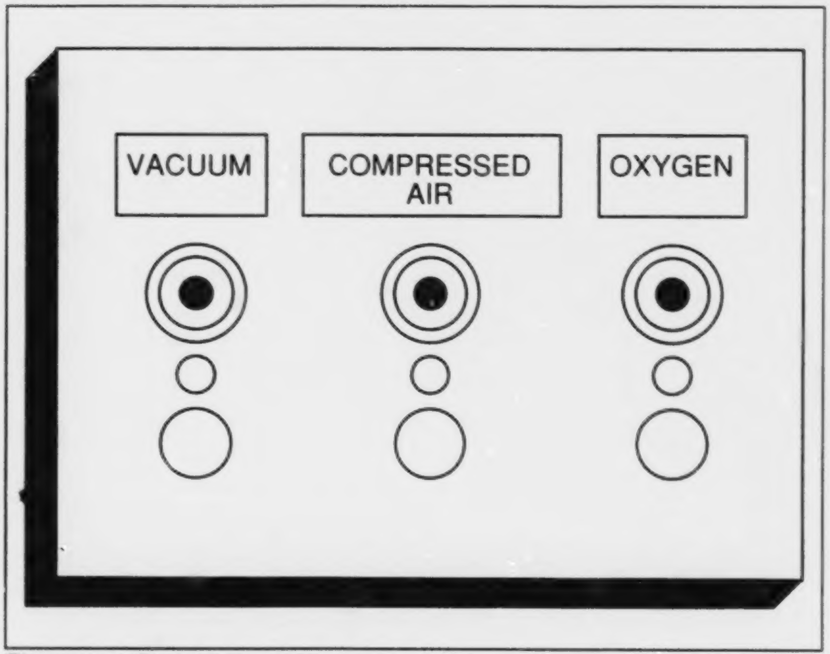


Figure 11 Piped-in oxygen

Oxygen may also be administered by means of a tank or cylinder. This is often seen in a long-term care facility and can be used in the home. Small portable tanks can improve mobility for patients dependent upon oxygen.

1855

More and more patients are needing oxygen on a long-term basis. Two relatively new oxygen sources are well-suited to these patients' needs. The **oxygen concentrator** is an electrical device which filters oxygen from the air and makes it available for therapeutic use. It works well in the nursing home or home-care setting. Liquid oxygen is available and very portable. A **portable unit** is refilled with a cylinder of liquid oxygen.

OBJECTIVE 12 **Match methods of administering oxygen to their descriptions.**

Oxygen may be administered in a number of ways to suit the needs of the patient. Some methods are used more frequently than others.

The **nasal cannula** (also called nasal prongs) is widely used and is appropriate for all age groups. It does not interfere with eating and talking as other methods might. The patient can move around and even ambulate freely with a long connecting tubing. Concentrations of oxygen are fairly low (23-44%). The liter flow is from 1 to 6 liters per minute.

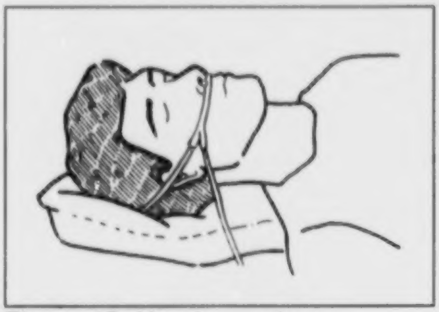


Figure 12 Nasal cannula

The **oxygen mask** comes in a variety of forms. The mask may be very objectionable for patients who are claustrophobic. Since it is placed over the nose and mouth, patients may feel they will be unable to breathe. Skin problems may occur in the area under the mask. The mask must be removed to eat and talking is difficult.

The **simple mask** requires a liter flow of 5 to 8 liters per minute and delivers a concentration of 40-60% oxygen

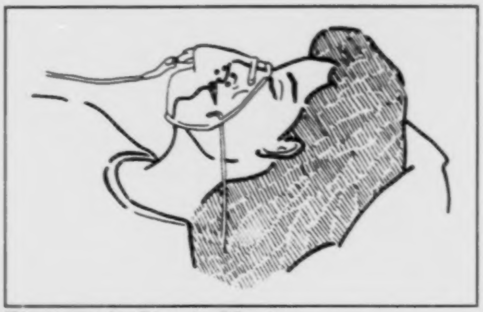


Figure 13 Simple Mask

The **partial rebreathing mask** has a reservoir bag attached, allowing the patient to rebreath air exhaled which is high in oxygen content. A two way valve between the mask and bag accomplishes this. Oxygen concentrations range from 35-60%. Liter flow is from 6 to 10 liters per minute.

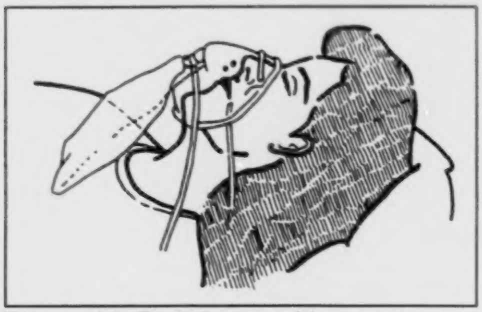


Figure 14 Partial rebreathing mask

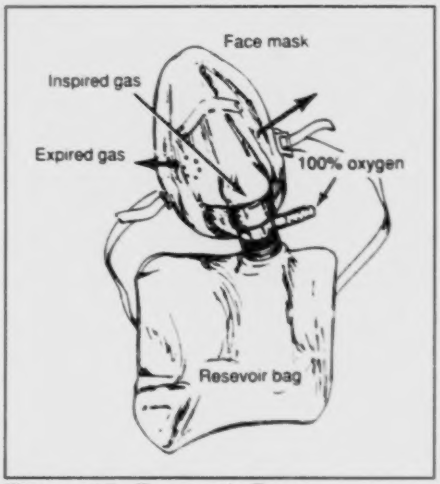

Face mask
Inspired gas
Expired gas
100% oxygen
Resevoir bag

Figure 15 Reservoir Bag

The **nonrebreathing mask** has a one-way valve between the reservoir bag and mask which prevents any exhaled air from being inhaled. It delivers a very high percentage of oxygen, ranging from 60-90%. Liter flow is from 6 to 15 liters per minute.

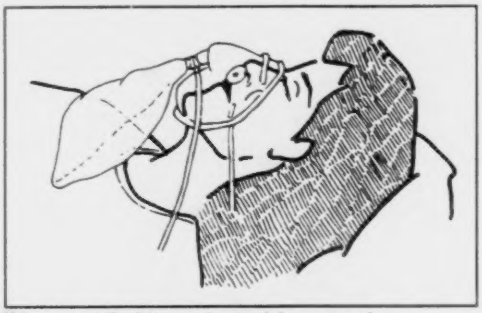
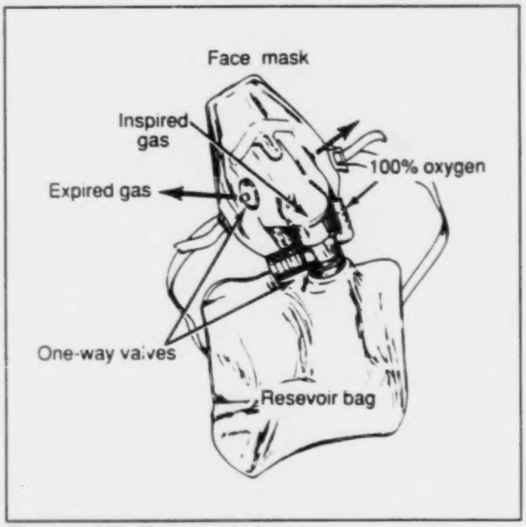


Figure 16 Nonrebreathing mask



Face mask
Inspired gas
100% oxygen
Expired gas
One-way valves
Resevoir bag

Figure 17 Reservoir bag

The **Venturi mask** is very precise in its delivery of oxygen concentration. A specially designed adapter mixes the oxygen with room air to deliver the desired oxygen concentration. Concentrations from 24-50% can be delivered by using different adapters and changing the settings. Liter flow may range from 4 to 8 liters per minute. The Venturi mask is often used for patients with COPD.

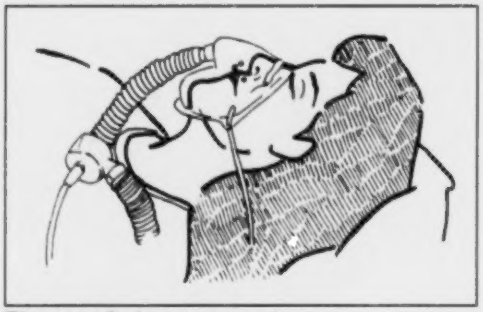


Figure 18 Venturi mask

A **face tent** is similar to a mask, but it does not fit tightly against the face. It therefore might be slightly less objectionable, but skin problems may still develop. Eating and talking are still difficult. Venturi attachments may be used with the face tent to deliver precise concentrations of oxygen. Oxygen concentrations range from 30-55%. The liter flow is usually 8 to 10 liters per minute.

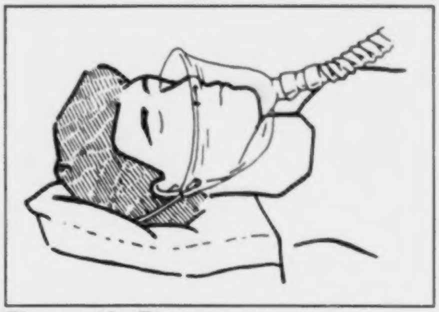


Figure 19 Face tent

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A **trach collar** is a means of supplying oxygen and increased humidity to a patient who has a tracheostomy. It fits over the tracheostomy site, but can be removed quickly.

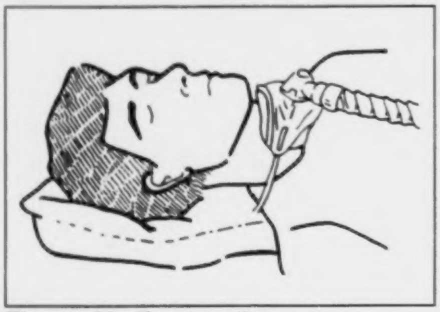

Figure 20 Trach collar

A **T-tube** is used to administer oxygen through a tracheostomy or endotracheal tube.

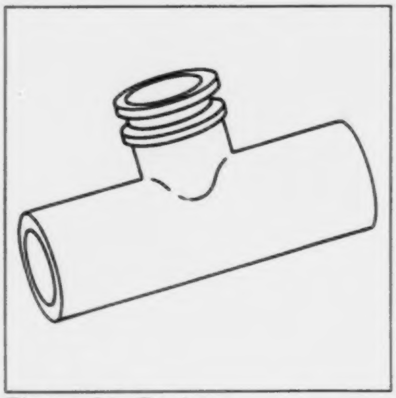

Figure 21 T-tube

1860

The **oxygen or mist tent** (also "croup tent") is used for children. It delivers high humidity along with the oxygen. A plastic canopy covers the bed. The canopy must be tucked securely under the mattress to keep oxygen and humidity inside. Linens become very wet with the humidity. The child can move freely within the tent, but must remain there for the desired effect. Oxygen concentrations are at 30-50% with oxygen delivered at 10 to 15 liters per minute.

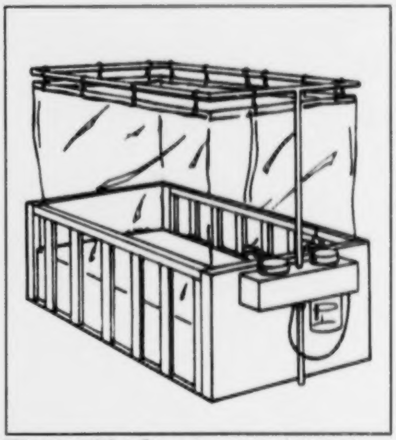

Figure 22 Oxygen or mist tent

The **oxygen hood** is used for infants. It fits over the infant's head. Concentrations of 22-100% may be provided; however concentrations greater than 40% can lead to increased blood concentrations over a period of time. **This can result in blindness.** An analyzer is used to monitor precise oxygen concentrations. Oxygen delivered by this method should always be heated or humidified.

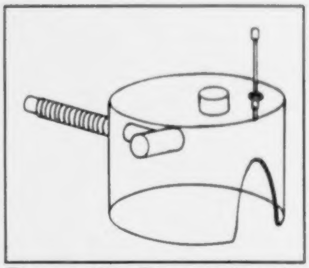

Figure 23 Oxygen hood

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ASSISTING WITH OBTAINING BLOOD GASES

Blood gas determination gives valuable information about the gases dissolved in blood. In assessing respiratory efficiency, oxygen levels are especially important. Nurses, laboratory technicians, or respiratory therapists may obtain the blood sample, depending on agency policy. The practical nurse might assist others in the procedure.

Arterial blood gas (ABG) specimens are collected from an artery while most other blood specimens are collected from a vein. The radial artery is the most common site. The finger is held on the artery just above the puncture site, as a guide. It definitely requires more skill than a venipuncture. A short, small gauge needle (25 or 26 gauge) is used to avoid damage to the artery.

A cup of ice is ready before the blood is obtained. Immediately after the blood is drawn, the entire syringe is placed in the ice and taken to the laboratory for testing. The ice slows the action of the gases in the blood so the laboratory results reflect the level of gases within the body. Every effort is made not to mix any room air with the blood during or after withdrawal.

After the needle is withdrawn, there must be firm pressure over the site for five to ten minutes. Without this pressure, a large hematoma can result. This is a good role for an assistant so the sample can go to the lab immediately.

The information on the laboratory requisition should reflect the patient's source of oxygen. This could be expressed as room air or the liter flow of an oxygen device used. This information is helpful in analyzing test results.

PULSE OXIMETRY

The pulse oximeter is becoming a very valuable tool in assessing respiratory function. Patients in the emergency room, intensive care unit, and the operating room can especially benefit from its use.

The pulse oximeter consists of a clip-like or adhesive sensor that is attached to a body part. The nail beds of the fingers are most commonly used, but toes, earlobes, and the bridge of the nose may also be used, depending on the age and activity of the patient.

Red and infrared light rays pass through the sensor into body tissue. The two types of light rays are absorbed differently by the hemoglobin depending upon the amount of oxygen bound to it. The sensor transmits this information to a digital display, supplying immediate information on oxygen saturation.

The sensor must be securely applied for accurate readings. Nail polish and artificial nails will interfere with the readings when the nail beds are used. Light from an outside source can sometimes interfere with the readings. Movement of the body part where the sensor is applied can cause faulty readings.

The pulse oximeter provides information on oxygenation of the blood much faster than drawing arterial gases and with far less discomfort to the patient. It must be remembered, however, that blood gases still offer more information than can be obtained by pulse oximetry.

POSTURAL DRAINAGE AND CHEST PERCUSSION

Postural drainage and chest percussion are not always considered nursing responsibilities. The respiratory therapist may be responsible for postural drainage and chest percussion. Many parents perform the procedures on their children at home and patients may position themselves for postural drainage. The nurse may be asked to reinforce teaching in these situations.

The purpose of postural drainage is to remove secretions which can pool in the lungs. Various positions allow for drainage from all portions of the lungs into the bronchi and then into the trachea so the patient can expectorate them. It is the use of gravity to keep the airway open and free of secretions. Chest percussion aids in loosening thick secretions so the patient can bring them up.

JOB SHEET 1

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 13a

Collect a throat culture.

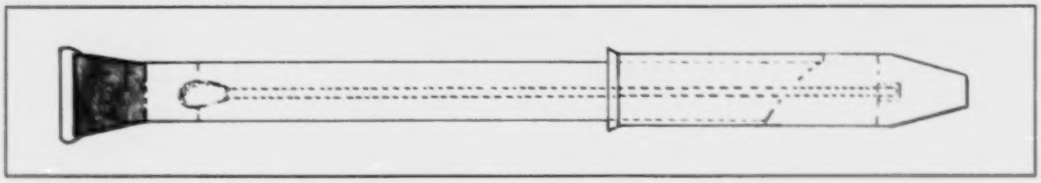
INTRODUCTION

Throat cultures are obtained to determine the organisms which may be growing in the throat and contributing to respiratory problems. If throat cultures are not obtained in the correct manner, the results will be inaccurate. Since treatment is based on the test results, treatment will be inadequate.

EQUIPMENT AND SUPPLIES

- Sterile cotton swabs
- Sterile culture tube or culture plates

NOTE: Swabs and culture tubes are often combined in a commercially prepared container with transport medium.



- Tongue blade
- Light source
- Gloves, if indicated

PROCEDURE

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Assess patient's ability to cooperate.

2. Note any medical or nursing diagnoses which would alter procedure.

Planning

3. Wash hands.

4. Obtain equipment.

5. Explain procedure to patient.

6. Provide privacy.

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General Science Skills
- Collect specimens

Life Science Skills
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with clients/customers/patients

Implementation

7. Position patient in sitting position unless contraindicated.

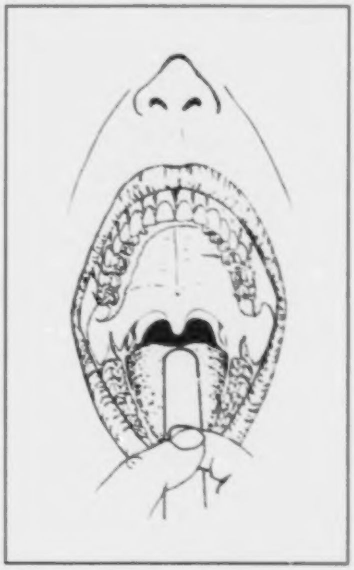
   NOTE: Fowler's position may be used for the hospitalized patient.

8. Direct light source at patient's mouth.

9. Have patient open mouth and say "ah".

   NOTE: This relaxes the tongue, allowing for better visualization of the pharynx.

10. Gently place tongue blade on tongue to view pharynx, noting areas of redness or drainage.



11. Insert sterile cotton swab without touching cotton portion to outside of container or any part of lips, teeth, tongue, or cheek.

12. Quickly roll sterile cotton swab over area which appears most inflamed.

    NOTE: The gag reflex is very easily stimulated. Gentle and rapid completion of the procedure will help alleviate discomfort.

13. Remove swab without touching lips, teeth, tongue or cheeks and place into sterile container or swab over culture plate.

14. Crush ampule at tip of commercially prepared container and push swab into liquid.

15. Replace top on container.

16. Dispose of tongue blade in trash.

17. Wash hands.

18. Attach label to container and send to laboratory with completed requisition or complete any further testing done in area.

NOTE: Quick tests for the presence of the streptococcal organism are available and frequently completed in the medical office setting.

Evaluation

19. Evaluate according to following criteria:

    a. Specimen was obtained without contamination.

    b. Patient was not too uncomfortable during procedure.

Documentation

20. Record:

    a. Collection of the specimen.

    b. Results of any testing done.

    c. Disposition of specimen.

    d. Appearance of oral and pharyngeal mucosa.

    e. Ability of patient to cooperate in procedure.

    f. Any complaints of patient.

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 1

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Collecting specimens
- Investigating health issues (medical)

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

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EMPLOYABILITY

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty following written instructions:
  - Stress the importance of learning medical terminology.
  - Discuss the importance of following instructions precisely.
  - Have students read instructions several times, noting key words and ideas.
- If students have difficulty interpreting graphics and symbols, discuss the illustration and how it relates to the task.
- If students have difficulty completing forms and records, examine the structure of the forms being used.
- If students have difficulty collecting specimens:
  - Explain that this procedure sometimes makes new students nervous, but is an easy, essential procedure that becomes routine with practice.
  - Discuss the extreme importance of following all safety procedures.
- If students have difficulty investigating health issues, discuss the kinds of information revealed by a throat culture.
- If students have difficulty applying active listening skills:
  - Encourage them to familiarize themselves with background information before communicating with the patient.

- Suggest they practice listening and then repeating the information.

EXAMPLE:	Patient:	"I gag very easily."
	Student:	"Since you gag easily, I will work quickly."

- Suggest that they be ready to listen before beginning communication.

- Stress the importance of focusing on the speaker.

- Remind them that maintaining eye contact enhances listening ability.

• If students have difficulty analyzing/applying non-verbal communication:

- Discuss some ways in which patients reveal information non-verbally.

  EXAMPLE:
  Facial expressions
  Tone of voice
  Movements
  Body position
  Mannerisms

- Discuss some ways in which the student can convey information non-verbally.

  EXAMPLE: The student can convey concern for the comfort and self-esteem of the patient by providing privacy during the procedure.

• If students have difficulty communicating with, interacting with, or dealing effectively with clients/customers/patients, review listening skills, giving/following oral directions, applying questioning techniques and non-verbal communication skills.

• If students have difficulty mastering a specific job task/procedure:

- Emphasize the fact that practice makes a person proficient, and proficiency makes a person confident.

- Suggest they study each component of the procedure to determine which area is causing difficulty.

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- Review the entire procedure.
- Team them with proficient students or professionals to practice the procedure.

- If students have difficulty applying safety practices/procedures:
    - Discuss the reasons for, and importance of, safety practices.
    - Review the safety procedures relevant to the specific task.
- If students have difficulty practicing good work habits/attitudes:
    - Encourage them to become familiar with the entire procedure before they begin the work.
    - Discuss the role that good work habits/attitudes have in obtaining and retaining employment.
    - Discuss what behaviors and attitudes constitute good work habits.
    - Make sure the student knows what is expected of him or her.

JOB SHEET 2 — PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 13b

Collect a sputum specimen.

INTRODUCTION

Laboratory examination of sputum helps in the diagnosis of disease. Since sputum is likely to be highly contaminated with pathogenic organisms, the nurse must take precautions to avoid contamination.

EQUIPMENT AND SUPPLIES

- Sterile specimen container

  NOTE: Specially designed double-walled containers with wide mouths funneling into a smaller collecting container help avoid contamination.

- Tissues
- Materials for oral hygiene, if desired
- Gloves, if indicated

PROCEDURE

Assessment and Analysis

1. Assess patient's ability to cooperate in procedure.
2. Assess patient's ability to cough and expectorate sputum.
3. Note any special instructions concerning number of specimens or amount of sputum needed.
4. Note any medical or nursing diagnoses which would alter procedure.

Planning

5. Wash hands.
6. Gather all equipment.
7. Explain procedure to patient.

   NOTE: Make sure patient understands that specimen must be material coughed up from the lungs, not saliva. Early morning or after an IPPB treatment may be the easiest time for the patient to produce a specimen.

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Collect specimens

Life Science Skills
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with clients/customers/patients

8. Provide privacy.

Implementation

9. Position patient in upright position unless contraindicated.

10. Instruct patient to cough and expectorate material directly into specimen container.

11. Repeat until adequate amount of material is collected.

    NOTE: 2-10 ml (1-2 tsp.) should be adequate unless the orders call for a specific amount or cumulative specimen.

12. Provide tissues for patient after expectorating.

13. Place lid on container promptly.

14. Provide patient with opportunity to rinse mouth or receive oral hygiene, if desired, because of unpleasant taste or odor of sputum.

15. Remove inner portion of double-walled container *or*, wearing gloves, wash outside of single container if it has been contaminated by sputum.

16. Make patient comfortable.

17. Label container and send to lab with appropriate requisition.

18. Wash hands.

Evaluation

19. Evaluate according to following criteria:

    a. Patient was able to expectorate specimen.

    b. An adequate amount of material was collected.

    c. Patient did not experience respiratory difficulty during specimen collection.

Documentation

20. Record:

    a. Collection of specimen.

    b. Characteristics of specimen including amount, color, consistency, and odor.

    c. Any difficulty encountered in collecting specimen.

    d. Disposition of specimen.

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 2

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the student by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Collecting specimens

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL OR RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty using English and metric measures or making measurements:
  - Review units of measure in the English and metric systems.
  - Determine which system is used on the available instrument and demonstrate its use.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before beginning the directions.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 3

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 13c

Assist with/induce deep breathing/coughing exercises.

INTRODUCTION

Deep breathing and coughing helps prevent a build up of secretions in the lungs. Deep breathing also promotes full lung expansion and prevents atelectasis. Post-operative patients and patients with chronic obstructive pulmonary disease (COPD) benefit from this procedure.

Frequently, patients need help and reminders to do an effective job of coughing and deep breathing. Pain and/or weakness may alter the effectiveness of the procedure. The nurse can help maintain respiratory function by teaching patients to deep breathe and cough effectively.

EQUIPMENT AND SUPPLIES

- Tissues
- Pillow (Optional)

NOTE: A small pillow or folded blanket held over an incision helps keep a post-operative patient more comfortable.

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

Assessment and Analysis

1. Assess audible breath sounds.
2. Assess auscultatory breath sounds.
3. Note pulse and respiratory rates.
4. Assess the ability of patient to follow directions.
5. Note any medical or nursing diagnoses which would alter the procedure.

Planning

6. Plan to teach patients going to surgery deep breathing and coughing techniques beforehand.

7. Encourage coughing and deep breathing at scheduled intervals, such as every two hours.

Life Science Skills
- Collect specimens
- Investigate health issues (medical)

Listening Skills
- Apply active listening skills

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Leadership/Influencing Skills
- Provide positive coaching

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with clients/customers/patients

8. Give pain medication about 30 minutes before deep breathing and coughing exercises for post-op patients.

   NOTE: Codeine suppresses coughing.

9. Wash hands.

10. Explain procedure to patient.

Implementation

11. Position patient in Fowler's position with knees flexed, if allowed.

    NOTE: The supine or side-lying positions with knees flexed are alternate positions.

12. Have patient splint any incisions with their hands, a pillow, or a folded blanket.

13. Instruct patient to inhale slowly through the nose.

14. Instruct patient to exhale slowly through the mouth with pursed lips.

    NOTE: This is especially important for the patient with COPD to prevent collapse of small airways.

15. After several deep breaths, have the patient give several short hacking coughs with mouth open on expiration.

    NOTE: This also prevents collapse of small airways.

16. Provide tissue for expectoration of any sputum.

17. Reassess breath sounds, pulse and respiratory rates.

18. Assist patient to assume comfortable position.

19. Wash hands.

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Evaluation

20. Evaluate using following criteria:

    a. Audible and auscultatory breath sounds cleared with procedure.

    b. Pulse and respiratory rates are normal or near normal following procedure.

    c. Patient was able to deep breathe and cough effectively.

    d. Patient was able to raise sputum.

    e. Patient did not experience unnecessary discomfort with procedure.

Documentation

21. Record:

    a. Assessment before and after procedure.

    b. Exact instructions given patient.

    c. Patient's ability to follow instructions.

    d. Effectiveness of technique in raising sputum.

    e. Amount, color, consistency, and odor of sputum.

    f. Any discomfort experienced by patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 3

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the student by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Collecting specimens

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Applying active listening skills

— Giving/following oral directions

— Analyzing/applying non-verbal communication

- Communicating with clients/customers/patients

INTERPERSONAL OR RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients
- Providing coaching

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty using English and metric measures or making measurements:
  - Review units of measure in the English and metric systems.
  - Determine which system is used on the available instrument and demonstrate its use.
- If students have difficulty giving/following oral directions:
  - Urge them to organize their thoughts before beginning the directions.
  - Encourage them to write the basic directions for a procedure and review them as needed.
  - Say the directions and have them repeat them back to you.
  - Emphasize the importance of practice in mastering this skill.
- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheet 1.

JOB SHEET 4 — PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE — XIV

OBJECTIVE 13d — **Position patient in orthopneic position.**

INTRODUCTION

Many patients can breathe better when they are in an upright position. The orthopneic position allows this improved breathing while encouraging complete lung expansion and providing rest for the patient.

EQUIPMENT AND SUPPLIES

- Overbed table
- Pillows
- Blanket (Optional)

PROCEDURE

Assessment and Analysis

1. Observe patient for dyspnea.
2. Note any medical or nursing diagnoses which would alter procedure.

Planning

3. Wash hands.
4. Obtain equipment.
5. Explain procedure to patient.

Implementation

5. Assist patient to upright position by raising bed to Fowler's position.
6. Position knee gatch comfortably or place a small pillow under patient's knees.
7. Position overbed table across bed.
8. Place pillow on overbed table.

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measures

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Collect specimens

- Investigate health issues (medical)

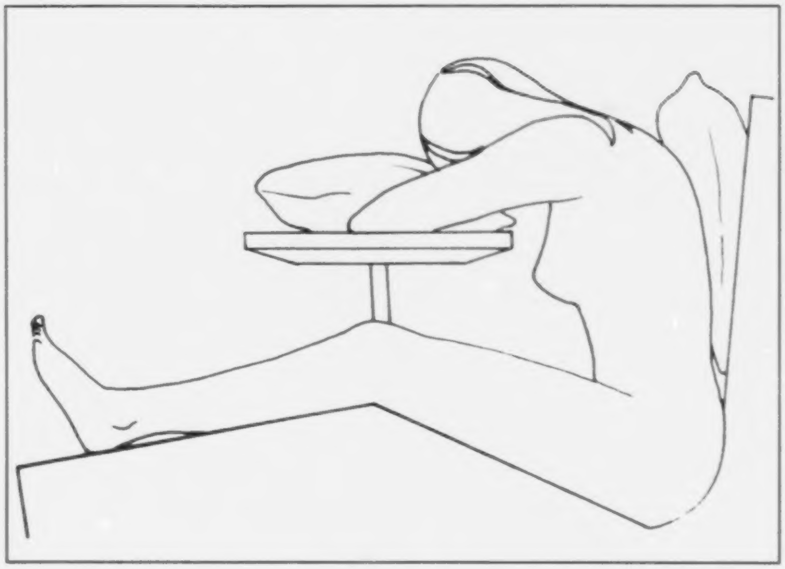
Interactive Communication Skills
- Apply active listening skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with clients/customers/patients

9. Instruct patient to lean forward, placing arms on overbed table and resting head on pillow.

10. Position pillow behind patient in comfortable manner.



11. Provide for warmth by placing blanket over back, if desired.

12. Place call light within easy reach.

13. Wash hands.

Evaluation

14. Evaluate according to following criteria.

    a. Dyspnea improves.

    b. Patient is comfortable.

Documentation

15. Record:

    a. Dyspnea noted before positioning.

    b. Positioning.

    c. Ability of patient to rest comfortably.

    d. Any improvement in respiratory effort.

BASIC SKILLS

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 4

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal/relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

MATHEMATICS SKILLS

- Using English and metric measures
- Making measurements

SCIENCE SKILLS

- Investigating/applying principles of anatomy/physiology
- Collecting specimens
- Investigating health issues

ORAL COMMUNICATION SKILLS

- Applying active listening skills
- Giving/following oral directions

- Analyzing/applying non-verbal communication
- Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

- Analyzing/applying non-verbal communication
- Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplement for Job Sheets 1 and 2.

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JOB SHEET 5 — PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 13e **Suction oronasal tract.**

INTRODUCTION

There are many times when the upper airways become occluded with mucus or other fluid. Patients who are extremely weak or comatose cannot handle secretions of the respiratory tract. Aspiration of feedings sometimes occurs. Mechanical suctioning can be a lifesaving measure in these circumstances. The nurse must be prepared to carry out this intervention.

EQUIPMENT AND SUPPLIES

- Suction kit containing:
  - Suction catheter
    Adults — 12-18 French
    Children — 8-10 French
    Infants — 8-10 French
  - One or two sterile gloves
  - Plastic-lined cardboard cup

  NOTE: If kits are not used, similar materials must be available.

- Y-connector, if control valve is not on catheter
- Sterile normal saline or water
- Suction machine or wall suction with connecting tubing
- Goggles and mask to prevent contact with secretions during procedure (optional)
- Yankauer suction tip (optional)

PROCEDURE

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs,etc.)

Functional Writing Skills
- Complete forms and records

Assessment and Analysis

1. Assess audible breath sounds.
2. Assess auscultatory breath sounds.
3. Note pulse and respiratory rates.
4. Note excess secretions in nose or mouth.
5. Note presence of vomitus in mouth.
6. Note any medical or nursing diagnoses which would alter procedure.

1887

Planning

7. Wash hands.
8. Obtain equipment.
9. Explain procedure to patient.
10. Position conscious patient in Fowler's position and unconscious patient in lateral position.
11. Turn on suction and check function.

NOTE: Wall suction pressures of 100-150 mm Hg are usually considered appropriate for adults and 50-75 mm Hg for infants and children.

Implementation

12. Open packet.
13. Set up cup.
14. Pour normal saline or water into cup.
15. Put on gloves.

NOTE: If only one glove is present, put it on dominant hand.

16. Pick up suction catheter in gloved dominant hand and connecting tube in non-dominant hand.
17. Connect the two, maintaining clean technique.

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (suction catheter)

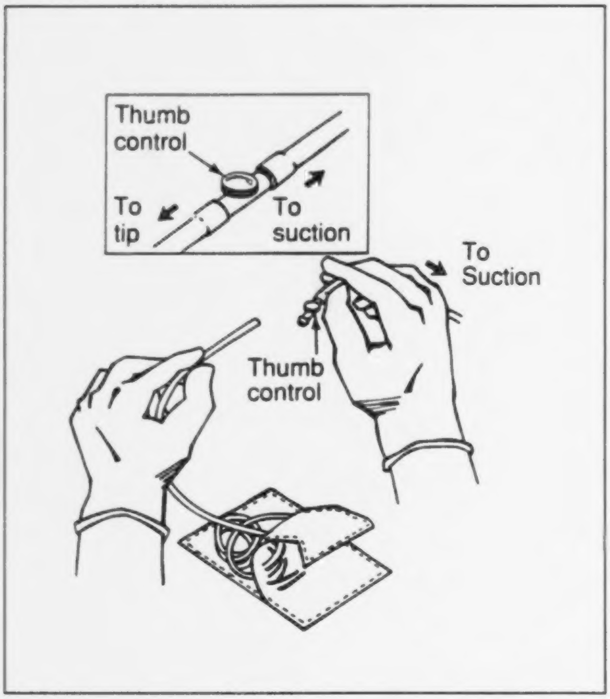
Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Analyze/apply nonverbal communication
- Communicate with clients/customers/patients

General Relating Skills
- Analyze/apply nonverbal communication
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes

- Deal effectively with clients/customers/ patients



18. Check for suction and lubricate catheter by suctioning small amount of fluid from cup.

19. Insert suction catheter:

    A. For nasopharyngeal suctioning:

        1. Estimate distance from earlobe to nostril and place dominant hand at that point on suction catheter.

        2. Insert catheter through nostril to that point.

    B. For oropharyngeal suctioning:

        1. Insert catheter along side of mouth toward pharynx.

           NOTE: Yankauer tips are used for suctioning mouth.

CAUTION!

MUCOUS MEMBRANE DAMAGE POSSIBLE. Suctioning during insertion of tip can damage mucous membrane. INSERT TIP PROPERLY BEFORE SUCTIONING.

---

20. Place thumb over control valve or open end of Y-connector to apply suction and rotate catheter gently while withdrawing.

WARNING

AIRWAY OCCLUSION POSSIBLE. Suction catheter occludes airway and removes air from patient. DO NOT SUCTION FOR MORE THAN 10-15 SECONDS.

---

21. Remove secretions collected in catheter by suctioning some sterile normal saline or water through catheter.

22. Repeat suctioning as necessary.

23. When suctioning has been completed, clear entire connecting tube of material with sterile fluid to avoid growth of pathogens there.

24. Turn off suction.

25. Disconnect suction catheter from connecting tubing and place connecting tubing around suction source to keep clean for next use.

26. Wrap catheter around gloved hand and pull glove down over catheter, forming bag for disposal.

    NOTE: If two gloves are used, pull second glove over first.

27. Dispose of bagged suction catheter in plastic-lined trash container.

28. Wash hands.

1890

29. Reassess patient for improvement of symptoms.

30. Make patient comfortable.

Evaluation

31. Evaluate using following criteria:

    a. Audible and auscultatory breath sounds cleared with procedure.

    b. Rapid pulse and respiratory rates decreased with procedure.

    c. Mouth and nose are free of fluid.

    d. Patient tolerated procedure without increased difficulty.

Documentation

32. Record:

    a. Assessment before and after procedure.

    b. Amount, color, consistency, and odor of material suctioned.

    c. Any difficulty experienced by patient.

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 5

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instrument (suction catheter)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

1892

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Analyzing/applying non-verbal communication

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Analyzing/applying non-verbal communication

— Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

— Mastering a specific job task/procedure

— Applying safety practices/procedures

— Developing good work habits/attitudes

— Dealing effectively with clients/customers/patients

- If students have difficulty using scientific instruments (suction catheter), demonstrate the use of the instrument.

- If students have difficulty investigating/applying principles of anatomy/physiology, review the appropriate units in *Body Structure and Function* or similar text.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements 1 and 2.

1893

JOB SHEET 6 — PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 13f **Use piped-in (wall) oxygen.**

INTRODUCTION

Most hospitals have oxygen supplies built in to the facility. An access plate is located on the wall in each patient unit. Oxygen is accessed by plugging the flow meter into the wall outlet.

EQUIPMENT AND SUPPLIES

- Flowmeter
- Humidifier bottle
- Distilled water
- Connecting tubing
- Device for administering oxygen
- "Oxygen in Use" sign

PROCEDURE

Assessment and Analysis

1. Assess for signs of hypoxia (tachycardia, tachypnea, anxiety).
2. Assess for open airway.
3. Note medical or nursing orders indicating need for oxygen administration.
4. Note order for oxygen method and rate.

Planning

5. Wash hands.
6. Obtain equipment.
7. Post sign indicating that oxygen is in use.

Implementation

8. Fill humidifier bottle with distilled water.
9. Attach humidifier bottle to flowmeter.

   NOTE: Humidification is considered necessary if liter flow is greater than 3 liters per minute.

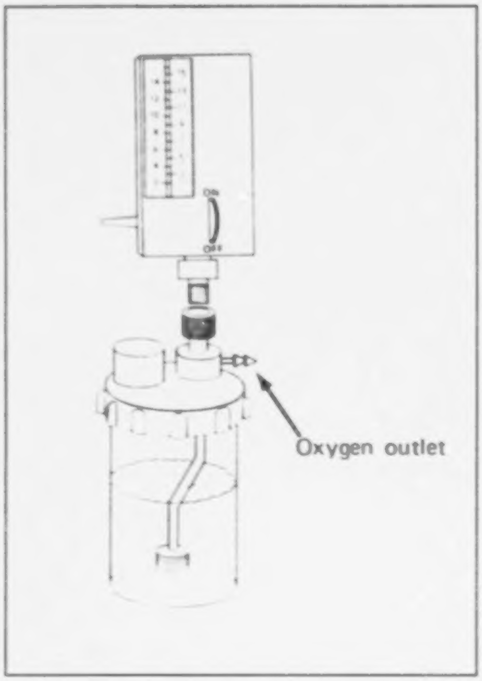
Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

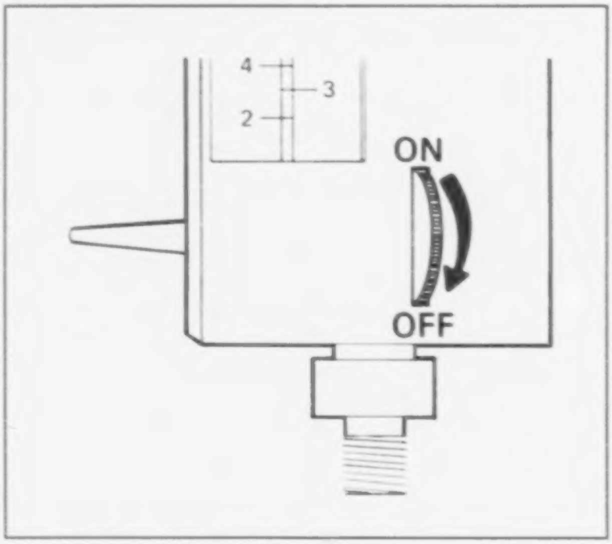
General Science Skills
- Use scientific instruments (Flowmeter)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

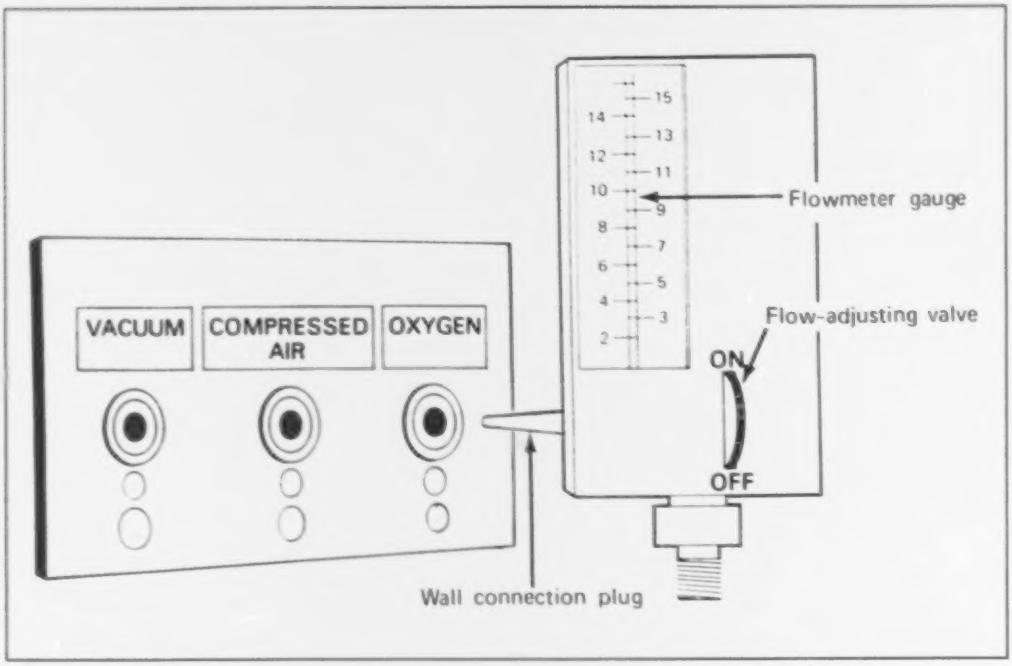
Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Dealing effectively with clients/ customers/patients



10. Check to make sure flowmeter is turned off.



11. Press flowmeter firmly into oxygen outlet.


15
14
13
12
11
10
9
8
7
6
5
4
3
2
Flowmeter gauge
Flow-adjusting valve
ON
OFF
VACUUM
COMPRESSED AIR
OXYGEN
Wall connection plug

12. Attach connecting tubing and oxygen delivery device.

13. Turn on flowmeter to prescribed delivery rate.

14. Feel outlet for air, indicating delivery of oxygen, and look for bubbles in humidifier bottle.

15. Place delivery device on patient.

Evaluation

16. Evaluate according to following criteria:

    a. Flow of air and bubbles in humidifier bottle indicate that oxygen flow is initiated.

    b. Rate of flow is set at prescribed level.

    c. Delivery device is placed on patient correctly.

Documentation

17. Record:

    a. Time oxygen therapy was initiated.

    b. Oxygen flow rate.

    c. Type of device used for delivery.

    d. Patient's condition at onset of therapy.

BASIC SKILLS

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 6

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

— Interpreting graphics and symbols

WRITING SKILLS

— Completing forms and records

SCIENCE SKILLS

— Using scientific instrument (flowmeter)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

EMPLOYABILITY SKILLS

— Mastering a specific job task/procedure

— Applying safety practices/procedures

— Developing good work habits/attitudes

— Dealing effectively with clients/customers/patients

- If students have difficulty using the flowmeter, demonstrate its use.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Job Sheets 1, 2, and 5.

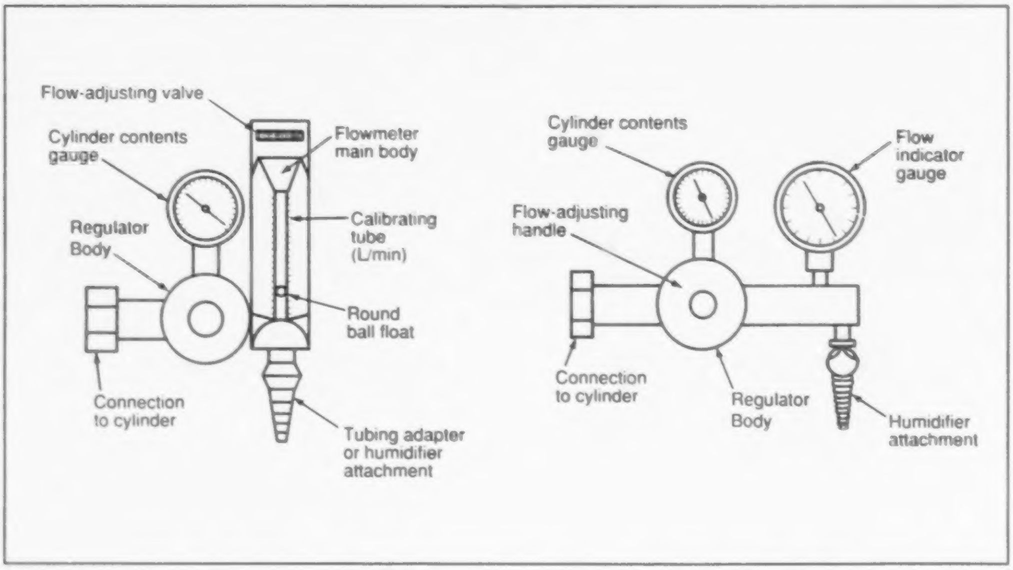
JOB SHEET 7 — PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE — XIV

OBJECTIVE 13g **Initiate and maintain an oxygen cylinder.**

INTRODUCTION In some health care facilities, especially nursing homes, oxygen must be delivered by cylinder or tank. If oxygen is needed in the home, it too, would be delivered by cylinder. This means that the nurse must know the special differences in initiating oxygen in this manner.

EQUIPMENT AND SUPPLIES

- Cylinder (tank) of oxygen
- Carrier
- Wrench of appropriate size for cylinder
- Regulator with flowmeter attached


Flow-adjusting valve
Cylinder contents gauge
Flowmeter main body
Regulator Body
Calibrating tube (L/min)
Round ball float
Connection to cylinder
Tubing adapter or humidifier attachment
Cylinder contents gauge
Flow indicator gauge
Flow-adjusting handle
Connection to cylinder
Regulator Body
Humidifier attachment

- Humidifier bottle
- Distilled water
- Connecting tubing
- Device for administering oxygen
- "Oxygen in use" sign

PROCEDURE

Functional Reading Skills
- Follow written instructions
- Interpret graphics and symbols (charts, diagrams, graphs, signs, etc.)

Functional Writing Skills
- Complete forms and records

General Science Skills
- Use scientific instruments (regulator with flowmeter)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Job Acquisition/ Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with clients/customers/ patients

Assessment and Analysis

1. Assess for signs of hypoxia (tachycardia, tachypnea, anxiety).
2. Assess for open airway.
3. Note medical or nursing orders indicating need for oxygen administration.
4. Note order for oxygen method and rate.

Planning

5. Wash hands.
6. Obtain equipment.

CAUTION!

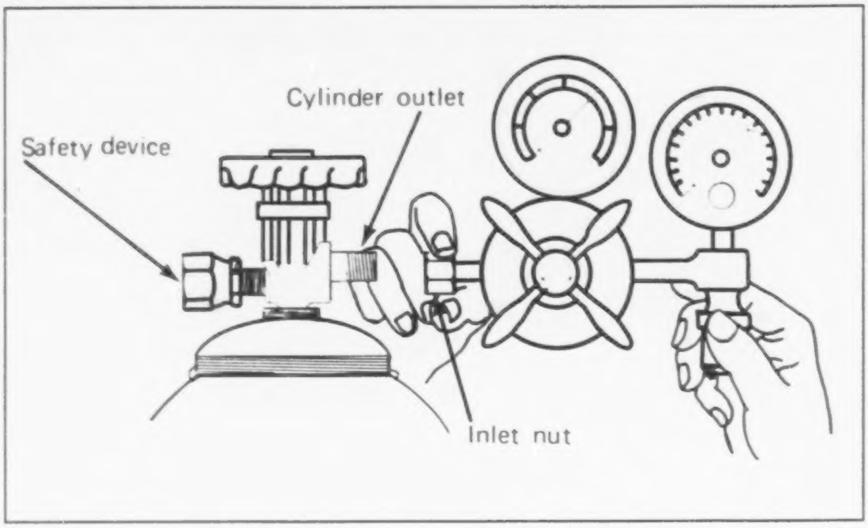
TIP-OVER POSSIBLE. Cylinder is awkward to transport and unstable at bedside without carrier. USE CARRIER TO TRANSPORT OXYGEN CYLINDER TO BEDSIDE AND PARK IT THERE.

7. Post signs indicating that oxygen is in use.

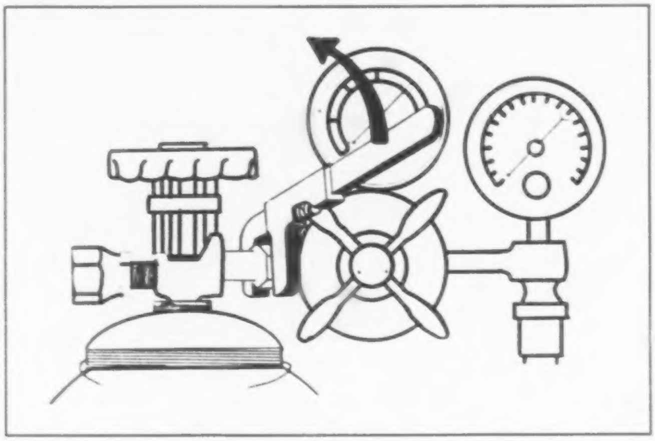
Implementation

8. Remove protective cap from cylinder.
9. "Crack" the tank by turning the cylinder valve clockwise slowly and then closing it quickly.

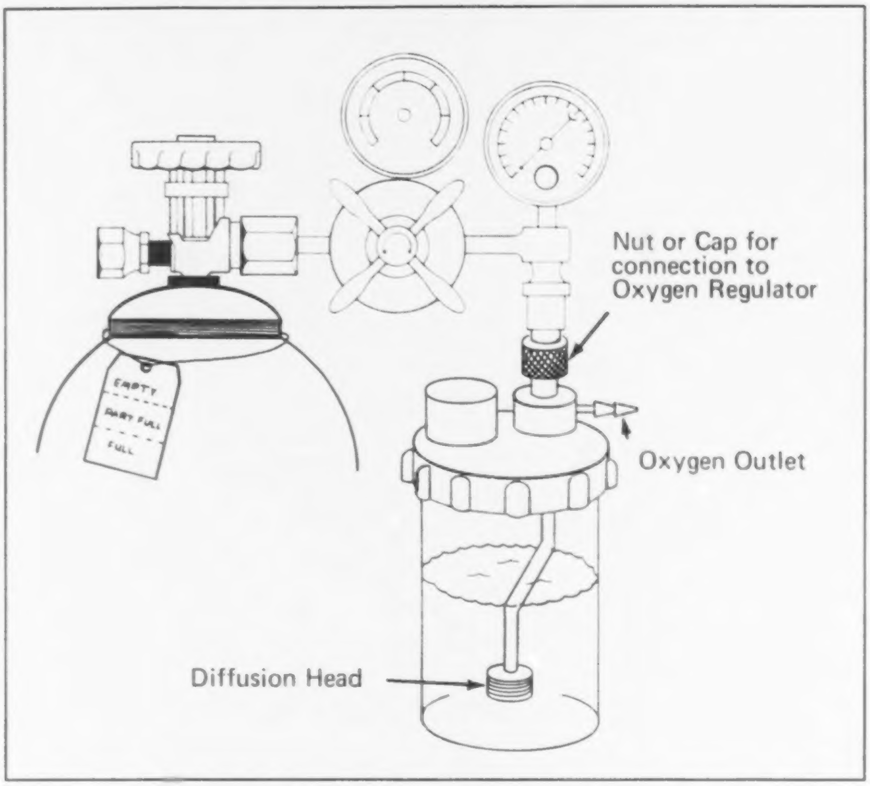
   NOTE: "Cracking" the valve blows off particles of dust that have accumulated. It produces a loud hissing noise that can be frightening. "Crack" the tank away from the bedside.


Cylinder outlet
Safety device
Inlet nut

10. Connect the regulator to the cylinder and tighten the inlet nut with a wrench.



11. Fill humidifier bottle and attach to regulator.


Nut or Cap for connection to Oxygen Regulator
EMPTY
PART FULL
FULL
Oxygen Outlet
Diffusion Head

12. Attach tubing and delivery device to oxygen outlet.

13. Open the cylinder valve slowly until it is fully opened and then turn back one-quarter turn.

14. Regulate flowmeter to appropriate liter flow.

15. Feel outlet for air, indicating delivery of oxygen, and look for bubbles in humidifier bottle.

16. Place delivery device on patient.

Evaluation

17. Evaluate according to following criteria:

    a. Oxygen cylinder is secured at bedside away from area of heavy traffic.

   b. Flow of air and bubbles in humidifier bottle indicate that oxygen flow is initiated.

   c. Rate of flow is set at prescribed level.

   d. Delivery device is placed on patient correctly.

Documentation

16. Record:

   a. Time oxygen therapy was initiated.

   b. Oxygen flow rate.

   c. Type of device used for delivery.

   d. Patient's condition at onset of therapy.

BASIC SKILLS

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE *XIV*

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 7

Skill development for:
READING SKILLS
WRITING SKILLS
SCIENCE SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, science, and employability skills are important.
- Discuss with them the following skills which are relevant to this task.

READING SKILLS

- Following written instructions
- Interpreting graphics and symbols

WRITING SKILLS

- Completing forms and records

SCIENCE SKILLS

- Using scientific instrument (regulator with flowmeter)
- Investigating/applying principles of anatomy/physiology
- Investigating health issues

EMPLOYABILITY SKILLS

- Mastering a specific job task/procedure
- Applying safety practices/procedures
- Developing good work habits/attitudes
- Dealing effectively with clients/customers/patients

- If students have difficulty using the flowmeter, demonstrate its use.

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Job Sheets 1, 2, and 5.

1906

JOB SHEET 8

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 13h

Use a nasal cannula.

INTRODUCTION

The nasal cannula is the most commonly used device for administering oxygen. It is appropriate for all age groups and well tolerated by most patients.

EQUIPMENT AND SUPPLIES

- Nasal cannula
- Connecting tubing
- Humidifier, if needed
- Sterile distilled water
- Flowmeter
- Oxygen source
- "Oxygen in Use" sign

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (flowmeter)

Life Science Skills
- Investigate/apply principles of anatomy/physiology
- Investigate health issues (medical)

Assessment and Analysis

1. Assess for signs of hypoxia (tachycardia, tachypnea, anxiety).

2. Assess for open airway.

3. Note medical or nursing orders indicating need for oxygen administration.

4. Note order for oxygen method and rate.

Planning

5. Wash hands.

6. Obtain equipment.

7. Explain procedure to patient.

8. Post sign indicating that oxygen is in use.

Implementation

9. Connect the cannula to connecting tubing and humidifier.

10. Turn on oxygen source and adjust to prescribed flow rate (1-6 liters per minute).

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with clients/customers/patients

11. Place prongs of nasal cannula in patient's nares.

12. Adjust and secure by:

    a. Positioning the tubing over and around each ear with the sliding adjuster under the chin.

    or

    b. Positioning the tubing around the patient's head.

    NOTE: Tape cannula in place on the face if necessary.

13. Place appropriate padding over the ears, if indicated.

    NOTE: Special foam protectors are on the market. If they are not available, gauze pads may be used.

14. Wash hands.

Evaluation

15. Evaluate according to following criteria:

    a. Flow of air and bubbles in humidifier bottle indicate that oxygen flow is initiated.

    b. Rate of flow is set at level prescribed by doctor.

    c. Nasal cannula fits securely over patient's face with padding over ears, if indicated.

Documentation

16. Record:

    a. Time oxygen therapy was initiated.

    b. Oxygen flow rate.

    c. Type of device used for delivery.

    d. Presence of tape or padding.

    e. Patient's condition at onset of therapy.

BASIC SKILLS

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 8

Skill development for: READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (flowmeter)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

— Mastering a specific job task/procedure

— Applying safety practices/procedures

— Developing good work habits/attitudes

— Dealing effectively with clients/customers/patients

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Job Sheets 1, 2, 5, and 6.

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JOB SHEET 9

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

OBJECTIVE 13i

Use an oxygen mask.

INTRODUCTION

While there are several types of masks which are indicated for various circumstances, they are all applied in much the same way.

EQUIPMENT AND SUPPLIES

- Mask
- Connecting tubing
- Humidifier, if needed
- Sterile distilled water
- Flowmeter
- Oxygen source
- "Oxygen in Use" sign

PROCEDURE

Functional Reading Skills
- Follow written instructions

Functional Writing Skills
- Complete forms and records

Math Application Skills
- Use English and metric measures

Functional Math Skills
- Make measurements

General Science Skills
- Use scientific instruments (flowmeter)

Life Science Skills
- Investigate/apply principles of anatomy/physiology

Assessment and Analysis

1. Assess for signs of hypoxia (tachycardia, tachypnea, anxiety).
2. Assess for open airway.
3. Note medical or nursing orders indicating need for oxygen administration.
4. Note order for oxygen method and rate.

Planning

5. Wash hands.
6. Obtain equipment.
7. Explain procedure to patient.
8. Post sign indicating that oxygen is in use.

Implementation

9. Connect the mask to connecting tubing and humidifier.
10. Turn on oxygen source and adjust to prescribed flow rate.
11. Place mask over face, covering nose and mouth.

- Investigate health issues (medical)

Interactive Communication Skills
- Give/follow oral directions
- Communicate with clients/customers/patients

General Relating Skills
- Interact with clients/customers/patients

Job Acquisition/Development Skills
- Master specific job task/procedure
- Apply safety practices/procedures
- Develop good work habits/attitudes
- Deal effectively with customers/clients

12. Adjust and secure by:

    a. Positioning the tubing over and around each ear with the sliding adjuster under the chin.

    or

    b. Positioning the tubing around the patient's head.

13. Place appropriate padding over the ears, if indicated.

    NOTE: Special foam protectors are on the market. If they are not available, gauze pads may be used.

14. Wash hands.

Evaluation

15. Evaluate according to following criteria:

    a. Flow of air and bubbles in humidifier bottle indicate that oxygen flow is initiated.

    b. Rate of flow is set at level prescribed by doctor.

    c. Face mask fits securely over patient's face with padding over ears, if indicated.

Documentation

16. Record:

    a. Time oxygen therapy was initiated.

    b. Oxygen flow rate.

    c. Type of device used for delivery.

    d. Presence of tape or padding.

    e. Patient's condition at onset of therapy.

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE

INSTRUCTIONAL SUPPLEMENT FOR JOB SHEET 9

Skill development for:
READING SKILLS
WRITING SKILLS
MATHEMATICS SKILLS
SCIENCE SKILLS
ORAL COMMUNICATION SKILLS
INTERPERSONAL/RELATING SKILLS
EMPLOYABILITY SKILLS

- Introduce the assignment to the students by discussing why reading, writing, mathematics, science, oral communication, interpersonal or relating, and employability skills are important.

- Discuss with them the following skills which are relevant to this task.

READING SKILLS

— Following written instructions

WRITING SKILLS

— Completing forms and records

MATHEMATICS SKILLS

— Using English and metric measures

— Making measurements

SCIENCE SKILLS

— Using scientific instruments (flowmeter)

— Investigating/applying principles of anatomy/physiology

— Investigating health issues

ORAL COMMUNICATION SKILLS

— Giving/following oral directions

— Communicating with clients/customers/patients

INTERPERSONAL/RELATING SKILLS

— Interacting with clients/customers/patients

EMPLOYABILITY SKILLS

— Mastering a specific job task/procedure

— Applying safety practices/procedures

— Developing good work habits/attitudes

— Dealing effectively with client/customer

- For additional suggestions on teaching Basic Skills, refer to Instructional Supplements for Job Sheets 1, 2, 5, and 6.

PRACTICAL TEST 1

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

JOB SHEET 1

Collect a throat culture.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed patient's ability to cooperate.	_____	_____
2. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
3. Washed hands.	_____	_____
4. Obtained equipment.	_____	_____
5. Explained procedure to patient.	_____	_____
6. Provided privacy.	_____	_____
7. Positioned patient in sitting position unless contraindicated.	_____	_____
8. Directed light source at patient's mouth.	_____	_____
9. Had patient open mouth and say "ah."	_____	_____
10. Gently placed tongue blade on tongue to view pharynx, noting areas of redness or drainage.	_____	_____

	YES	NO
11. Inserted sterile cotton swab without touching cotton portion to outside of container or any part of lips, teeth, tongue, or cheek.	____	____
12. Quickly rolled sterile cotton swab over area which appeared most inflamed.	____	____
13. Removed swab without touching lips, tongue, or cheeks and placed into sterile container or swabbed over culture plate.	____	____
14. Crushed ampule at tip of commercially prepared container and pushed swab into liquid.	____	____
15. Replaced top of container.	____	____
16. Disposed of tongue blade in trash.	____	____
17. Washed hands.		
18. Attached label to container and sent to laboratory with completed requisition or completed any further testing done in area.	____	____
19. Evaluated according to established criteria.	____	____
20. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

1916

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Specimen was obtained without contamination	4	3	2	1
Procedure was done correctly and proficiently	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1918

PRACTICAL TEST 2

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

JOB SHEET 2

Collect a sputum specimen.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. _____

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed patient's ability to cooperate.	_____	_____
2. Assessed patient's ability to cough and expectorate sputum.	_____	_____
3. Noted any special instructions concerning number of specimens or amount of sputum needed.	_____	_____
4. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
5. Washed hands.	_____	_____
6. Gathered all equipment.	_____	_____
7. Explained procedure to patient.	_____	_____
8. Provided privacy.	_____	_____
9. Positioned patient in upright position unless contraindicated.	_____	_____

	YES	NO
10. Instructed patient to cough and expectorate material directly into specimen container.	____	____
11. Repeated until adequate amount of material was collected.	____	____
12. Provided tissues for patient after expectorating.	____	____
13. Placed lid on container promptly.	____	____
14. Provided patient with opportunity to rinse mouth or receive oral hygiene, if desired, because of unpleasant taste or odor of sputum.	____	____
15. Removed inner portion of double-walled container *or*, wearing gloves, washed outside of single container if it had been contaminated by sputum.	____	____
16. Made patient comfortable.	____	____
17. Labeled container and sent to lab with appropriate requisition.	____	____
18. Washed hands.	____	____
19. Evaluated according to established criteria.	____	____
20. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ______________________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Handled specimen without contamination	4	3	2	1
Provided clear instructions to patient	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 3

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

JOB SHEET 3

Assist with/induce deep breathing/coughing exercises.

STUDENT'S NAME ______________________ DATE ______________

EVALUATOR'S NAME ______________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed audible breath sounds.	_____	_____
2. Assessed auscultatory breath sounds.	_____	_____
3. Noted pulse and respiratory rates.	_____	_____
4. Assess the ability of patient to follow directions.	_____	_____
5. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
6. Planned to teach patients going to surgery deep breathing and coughing techniques beforehand.	_____	_____
7. Encouraged coughing and deep breathing at scheduled intervals, such as every two hours.	_____	_____
8. Gave pain medication about 30 minutes before deep breathing and coughing exercises for post-op patients.	_____	_____

		YES	NO
9.	Washed hands.		
10.	Explained procedure to patient.		
11.	Positioned patient in Fowler's position with knees flexed if allowed.		
12.	Had patient splint any incision with their hands, a pillow, or a folded blanket.		
13.	Instructed patient to inhale slowly through the nose.		
14.	Instructed patient to exhale slowly through the mouth with pursed lips.		
15.	After several deep breaths, had the patient give several short hacking coughs with mouth open on expiration.		
16.	Provided tissue for expectoration of any sputum.		
17.	Reassessed breath sounds, pulse, and respiratory rates.		
18.	Assisted patient to assume comfortable position.		
19.	Washed hands.		
20.	Evaluated using established criteria.		
21.	Documented appropriately.		

EVALUATOR'S COMMENTS ______________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Provided clear instructions to patients.	4	3	2	1
Performed procedure correctly and proficiently.	4	3	2	1
Provided appropriate assistance to patient.	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1926

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

JOB SHEET 4

Position patient in orthopneic position.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Observed patient for dyspnea.	_____	_____
2. Noted any medical or nursing diagnoses which would alter procedure.	_____	_____
3. Washed hands.	_____	_____
4. Obtained equipment.	_____	_____
5. Explained procedure to patient.	_____	_____
6. Assisted patient to upright position by raising bed to Fowler's position.	_____	_____
7. Positioned knee gatch comfortably or placed a small pillow under patient's knee.	_____	_____
8. Positioned overbed table across bed.	_____	_____
9. Placed pillow on overbed table.	_____	_____

		YES	NO
10.	Instructed patient to lean forward, placing arms on overbed table and resting head on pillow.	_____	_____
11.	Positioned pillow behind patient in comfortable manner.	_____	_____
12.	Provided for warmth by placing blanket over back, if desired.	_____	_____
13.	Placed call light within easy reach.	_____	_____
14.	Washed hands.	_____	_____
15.	Evaluated according to established criteria.	_____	_____
16.	Documented appropriately.	_____	_____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria	4	3	2	1
Provided clear instructions and assistance to patient.				

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1930

JOB SHEET 5

Suction oronasal tract.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed audible breath sounds.	_____	_____
2. Assessed auscultatory breath sounds.	_____	_____
3. Noted pulse and respiratory rates.	_____	_____
4. Noted excess secretions in nose or mouth.	_____	_____
5. Noted presence of vomitus in mouth.	_____	_____
6. Noted any medical or nursing diagnosis which would alter procedure.	_____	_____
7. Washed hands.	_____	_____
8. Obtained equipment.	_____	_____
9. Explained procedure to patient.	_____	_____
10. Positioned conscious patient in Fowler's position and unconscious patient in lateral position.	_____	_____

	YES	NO
11. Turned on suction and checked function.	____	____
12. Opened packet.	____	____
13. Set up cup.	____	____
14. Poured normal saline or water into cup.	____	____
15. Put on gloves.	____	____
16. Picked up suction catheter in gloved dominant hand and connecting tube in non-dominant hand.	____	____
17. Connected the two, maintaining clean technique.	____	____
18. Checked for suction and lubricated catheter by suctioning small amount of fluid from cup.	____	____
19. Inserted suction catheter:		
A. For nasopharyngeal suctioning:		
1. Estimated distance from ear-lobe to nostril and placed dominant hand at that point on suction catheter.	____	____
2. Inserted catheter through nostril to that point.	____	____
B. For oropharyngeal suctioning:		
1. Inserted catheter along side of mouth toward pharynx.	____	____
20. Placed thumb over control valve or open end of Y-connector to apply suction and rotate catheter gently while withdrawing.	____	____

1932

	YES	NO
21. Removed secretions collected in catheter by suctioning some sterile normal saline or water through catheter.	____	____
22. Repeated suctioning as necessary.	____	____
23. When suctioning was completed, cleared entire connecting tube of material with sterile fluid to avoid growth of pathogens there.	____	____
24. Turned off suction.	____	____
25. Disconnected suction catheter from connecting tubing and placed connecting tubing around suction source to keep clean for next use.	____	____
26. Wrapped catheter around gloved hand and pulled glove down over catheter forming bag for disposal.	____	____
27. Disposed of bagged suction catheter in plastic-lined trash container.	____	____
28. Washed hands.		
29. Reassessed patient for improvement of symptoms.	____	____
30. Made patient comfortable.	____	____
31. Evaluated using established criteria.	____	____
32. Documented appropriately.	____	____

EVALUATOR'S COMMENTS ________________________________

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Gathered appropriate material	4	3	2	1
Performed procedure correctly and proficiently	4	3	2	1
Applied suction appropriately	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

1934

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1935

PRACTICAL TEST 6

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

JOB SHEET 6

Use piped-in (wall) oxygen.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME __________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed for signs of hypoxia.	_____	_____
2. Assessed for open airway.	_____	_____
3. Noted medical or nursing orders indicating need for oxygen administration.	_____	_____
4. Noted order for oxygen method and rate.	_____	_____
5. Washed hands.	_____	_____
6. Obtained equipment.	_____	_____
7. Posted sign indicating that oxygen was in use.	_____	_____
8. Filled humidifier bottle with distilled water.	_____	_____
9. Attached humidifier bottle to flowmeter.	_____	_____

1936

	YES	NO
10. Checked to make sure flowmeter was turned off.		
11. Pressed flowmeter firmly into oxygen outlet.		
12. Attached connecting tubing and oxygen delivery device.		
13. Turned on flowmeter to prescribed delivery rate.		
14. Felt outlet for air, indicating delivery of oxygen, and looked for bubbles in humidifier bottle.		
15. Placed delivery device on patient.		
16. Evaluated according to established criteria.		
17. Documented appropriately.		

EVALUATOR'S COMMENTS ______________________________

____

1937

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Gathered appropriate equipment	4	3	2	1
Performed procedure correctly and proficiently	4	3	2	1
Placed delivery device correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

1938

(Date)

(Evaluator's Signature)

(Evaluator's Position)

PRACTICAL TEST 7

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE *XIV*

JOB SHEET 7

Initiate and maintain an oxygen cylinder.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed for signs of hypoxia.	____	____
2. Assessed for open airway.	____	____
3. Noted medical or nursing orders indicating need for oxygen administration.	____	____
4. Noted order for oxygen method and rate.	____	____
5. Washed hands.	____	____
6. Obtained equipment.	____	____
7. Posted signs indicating that oxygen was in use.	____	____
8. Removed protective cap from cylinder.	____	____
9. Cracked the tank by turning the cylinder valve clockwise slowly and then closing it quickly.	____	____

	YES	NO
10. Connected the regulator to the cylinder and tightened the inlet nut with a wrench.		
11. Filled humidifier bottle and attached to regulator.		
12. Attached tubing and delivery device to oxygen outlet.		
13. Opened the cylinder valve slowly until it was fully opened and then turn it back one-quarter turn.		
14. Regulated flowmeter to appropriate liter flow.		
15. Felt outlet for air, indicating delivery of oxygen and looked for bubbles in humidifier bottle.		
16. Placed delivery device on patient.		
17. Evaluated according to established criteria.		
18. Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Cylinder secured firmly in place	4	3	2	1
Performed procedure correctly and proficiently	4	3	2	1
Placed delivery device correctly	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1943

PRACTICAL TEST 8

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

JOB SHEET 8

Use a nasal cannula.

STUDENT'S NAME ____________________ DATE ____________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed for signs of hypoxia.	_____	_____
2. Assessed for open airway.	_____	_____
3. Noted medical or nursing orders indicating need for oxygen administration.	_____	_____
4. Noted order for oxygen method and rate.	_____	_____
5. Washed hands.	_____	_____
6. Obtained equipment.	_____	_____
7. Explained procedure to patient.	_____	_____
8. Posted signs indicating that oxygen was in use.	_____	_____
9. Connected the cannula to connecting tubing and humidifier.	_____	_____

1944

		YES	NO
10.	Turned on oxygen source and adjusted to prescribed flow rate.	____	____
11.	Placed prongs of nasal cannula in patient's nares.	____	____
12.	Adjusted and secured by:		
	a. Positioning the tubing over and around each ear with the sliding adjuster under the chin.	____	____
	or		
	b. Positioning the tubing around the patient's head.	____	____
13.	Placed appropriate padding over the ears, if indicated.	____	____
14.	Washed hands.	____	____
15.	Evaluated according to established criteria.	____	____
16.	Documented appropriately.	____	____

EVALUATOR'S COMMENTS ____

____

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Performed procedure correctly and proficiently	4	3	2	1
Positioned nasal cannula correctly	4	3	2	1
Set oxygen flow rate at prescribed level	4	3	2	1

EVALUATOR'S COMMENTS

____

____

____

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1947

JOB SHEET 9

Use an oxygen mask.

STUDENT'S NAME ____________________ DATE ______________

EVALUATOR'S NAME ____________________ ATTEMPT NO. ______

INSTRUCTIONS

When you are ready to perform this task, ask your instructor to observe the procedure and complete this form. All items listed under "Process Evaluation" must receive a "Yes" for you to receive an acceptable performance evaluation.

PROCESS EVALUATION

Evaluator Note: Place a check mark in the "Yes" or "No" blanks to designate whether or not the student has satisfactorily achieved each step in this procedure. If the student is unable to achieve this competency, have the student review the materials and try again.

The student	YES	NO
1. Assessed for signs of hypoxia.	_____	_____
2. Assessed for open airway.	_____	_____
3. Noted medical or nursing orders indicating need for oxygen administration.	_____	_____
4. Noted order for oxygen method and rate.	_____	_____
5. Washed hands.	_____	_____
6. Obtained equipment.	_____	_____
7. Explained procedure to patient.	_____	_____
8. Posted signs indicating that oxygen was in use.	_____	_____
9. Connected the mask to connecting tubing and humidifier.	_____	_____

1948

	YES	NO
10. Turned on oxygen source and adjusted to prescribed flow rate.		
11. Placed mask over face, covering nose and mouth.		
12. Adjusted and secured by:		
a. Positioning the tubing over and around each ear with the sliding adjuster under the chin.		
or		
b. Positioning the tubing around the patient's head.		
13. Placed appropriate padding over the ears, if indicated.		
14. Washed hands.		
15. Evaluated according to established criteria.		
16. Documented appropriately.		

EVALUATOR'S COMMENTS

PRODUCT EVALUATION

Evaluator Note: Rate the student on the following criteria by circling the appropriate numbers. Each criterion must receive a rating of "3" or higher to demonstrate student mastery. (See performance evaluation key.) A student who is unable to demonstrate mastery should review the materials and submit another product for evaluation.

Criteria				
Performed procedure correctly and proficiently	4	3	2	1
Positioned mask correctly	4	3	2	1
Set oxygen flow rate at prescribed level	4	3	2	1

EVALUATOR'S COMMENTS

AVERAGE RATING

Evaluator Note: To obtain an average rating for the competency profile, total the designated points in "Product Evaluation" and divide by the total number of criteria. Circle the rating on the "Performance Evaluation Key" below.

PERFORMANCE EVALUATION KEY

4 — Skilled — Can perform job with no additional training.
3 — Moderately skilled — Has performed job during training program; limited additional training may be required.
2 — Limited skill — Has performed job during training program; additional training is required to develop skill.
1 — Unskilled — Is familiar with process, but is unable to perform job.

1950

(Date)

(Evaluator's Signature)

(Evaluator's Position)

1951

WRITTEN TEST

PROVIDE CARE FOR PATIENTS REQUIRING RESPIRATORY ASSISTANCE XIV

NAME ______________________________ SCORE ________

OBJECTIVE 1

Match terms associated with respiratory assistance to their correct definitions. Write the correct letter in the blank.

Part 1

______1. Nostrils

______2. Difficulty in breathing

______3. Transfer of air between lungs and the environment

______4. Blood-tinged sputum

______5. Pertaining to the lungs

______6. Lack of oxygen

______7. Secretion of the respiratory tract

______8. Collapse of portion of lungs

______9. Any one of a number of progressive lung diseases which interferes with the ventilation function of the lungs

a. Anoxia

b. Atelectasis

c. Chest percussion

d. Chronic obstructive pulmonary disease (COPD)

e. Dyspnea

f. Hemoptysis

g. Hypoxemia

h. Hypoxia

i. Nares

j. Orthopnea

k. Pulmonary

l. Sputum

m. Ventilation

n. Venturi

1952

Part 2

_______1. Measurement of air moved by the lungs at various points of respiration

_______2. To bring up sputum

_______3. High pitched, crowing-type respiratory noise caused by obstruction at the larynx

_______4. Determination of levels of gases dissolved in circulating blood

_______5. Deficiency of oxygen in the blood

_______6. Deep, snoring-type respiratory noise caused by partial obstruction of upper airways

_______7. Abnormal respiratory pattern demonstrated by a fall of soft tissue around bony areas

_______8. Oxygen deficiency

_______9. Oxygen-carrying portion of the blood

a. Atelectasis

b. Blood gases

c. Expectorate

d. Hemoglobin

e. Hypoxemia

f. Hypoxia

g. Nasal cannula

h. Orthopnea

i. Pulmonary function tests

j. Retractions

k. Stertor

l. Stridor

m. Sputum

1953

Part 3

______ 1. Series of positions to stimulate drainage of secretions from all portions of the lungs

______ 2. Type of oxygen delivery which delivers precise concentrations of oxygen

______ 3. Technique of using cupped hands over chest to loosen secretions

______ 4. Technique to encourage increased lung expansion by visually showing amount of air moved with inhalation

______ 5. Removal of fluids by mechanical means

______ 6. Measure of oxygen delivered

______ 7. Device for delivering oxygen, consists of short prongs which fit into the nares

______ 8. Technique of stimulating more complete lung inflation by delivery of air under pressure

______ 9. Difficulty in breathing except in the upright position

a. Anoxia

b. Chest percussion

c. Incentive spirometry

d. Intermittent positive pressure breathing (IPPB)

e. Liter flow

f. Nasal cannula

g. Orthopnea

h. Postural drainage

i. Stertor

j. Stridor

k. Suctioning

l. Ventilation

m. Venturi mask

OBJECTIVE 2

List three processes that influence the body's ability to receive oxygen.

____

____

____

____

____

____

OBJECTIVE 3

Select from a list factors that influence the respiration processes. Write an "X" in the blank before each factor.

______1. An adequate oxygen supply

______2. Pink nail beds

______3. An open airway

______4. Healthy lung tissue

______5. Adequate white blood cells and platelets

______6. Intact chest cavity

______7. Sufficient nerve and chemical control of respiration

______8. Healthy heart

______9. Ribs properly aligned

______10. Adequate circulation

______11. Adequate red blood cells and hemoglobin

______12. Healthy thyroid.

OBJECTIVE 4

Choose the word or phrase to complete statements about how physical assessment data are used in assessing the adequacy of a patient's respiratory effort. Write the letter of the correct answer in the blank.

______1. During assessment of the chest, the nurse notices that tissue seems to sink in between the ribs. The nurse would be correct in describing this as ___.

a. flaring
b. asymmetrical
c. Cheyne-Stokes
d. retractions

1955

______2. The assessment finding that would lead the nurse to believe that the patient may be experiencing respiratory difficulty is ___.

a. the skin is pink and warm to touch
b. the pupils react unequally to light and accommodation
c. the patient expresses increasing anxiety
d. the blood pressure is 160/100

______3. The best description of sputum is ___.

a. the material suctioned from the pharynx
b. material produced when tuberculosis is present
c. the major indicator of respiratory disease
d. mucus produced in the respiratory tract

______4. If sputum were described as copious and tenacious, it could also be described as ___.

a. a small amount of watery fluid
b. a large amount of sticky material
c. blood tinged
d. frothy and pink

______5. Respiratory movement such as flaring of the nares, use of abdominal or neck muscles, asymmetrical movements or retractions indicate ___.

a. apnea
b. dyspnea
c. tachypnea
d. bradypnea

______6. It is important for the nurse assessing respiratory effort to assess the pulse because respiratory problems ___.

a. increase the pulse rate
b. decrease the pulse rate
c. increase the volume
d. decrease the volume

1956

______7. Chest shape is assessed because it can indicate chest expansion and the presence of ___.

a. hyperventilation
b. tachypnea
c. emphysema
d. hemoptysis

______8. If a patient tends to lean forward with the arms abducted from the sides, the nurse should look for additional signs of ___.

a. tachypnea
b. productive cough
c. pleural friction rubs
d. chronic respiratory disease

OBJECTIVE 5

Choose the word or phrase to complete statements about how diagnostic testing data are used in assessing the adequacy of a patient's respiratory effort. Write the correct letter in the blank.

______1. Pulse oximetry would be useful in determining ___.

a. total blood volume
b. the amount of air moved in and out of the lungs
c. estimated amount of oxygen saturation
d. an infection caused by the streptococcal organism

______2. The ability of the lungs to move air in and out of the respiratory system is determined by ___.

a. a chest x-ray
b. pulmonary function testing
c. obtaining a complete blood count
d. pulse oximetry

______3. Fractured ribs are suspected. The diagnostic test most likely to be used is ___.

a. pulmonary function testing
b. blood gases
c. sputum specimen
d. chest x-ray

1957

______4. A measure of the amount of oxygen and carbon dioxide present in the blood is a ___.

a. throat culture
b. pulmonary function test
c. blood gases test
d. pulse oximetry

______5. A throat culture is useful in identifying ___.

a. organisms in the pharynx
b. organisms in the respiratory structures
c. tuberculosis
d. gases in the blood

______6. A sputum specimen is useful in identifying ___.

a. organisms in the pharynx
b. organisms in the lungs
c. blood gases
d. COPD

OBJECTIVE 6

Choose the word or phrase to complete statements about how nursing history data are used in assessing the adequacy of a patient's respiratory effort. Write the correct letter in the blank.

______1. Which item in the patient's history could indicate the possibility of respiratory problems? The patient ___.

a. runs a mile each day
b. develops a rash after eating strawberries
c. takes aspirin for arthritis
d. works in a flour mill

______2. The patient who would be at greatest respiratory risk is ___.

a. a 42 year old female who weighs 140 pounds
b. an 88 year old male with emphysema
c. a 30 year old female who smokes a pack of cigarettes a day
d. a 50 year old male with an abdominal incision

______3. Which item in the patient's past history might lead the nurse to believe that the patient is at risk for respiratory problems? The patient ____.

a. has had a number of surgical procedures
b. suffers from gastric ulcers
c. has had a heart attack
d. was in a car accident one year ago

OBJECTIVE 7

Match abnormal breathing patterns to their descriptions. Write the correct letter in the blank.

______1. Difficulty breathing except in the upright position

______2. Rapid respiratory rate

______3. Absence of respirations

______4. Difficulty in breathing

______5. Slow respiratory rate

a. Apnea
b. Bradypnea
c. Cheyne-Stokes
d. Dyspnea
e. Orthopnea
f. Rhonchi
g. Tachypnea

OBJECTIVE 8

Match nursing interventions that increase respiratory efficiency. Write the correct letter in the blank.

______1. To increase inspiratory effort

______2. To drain secretions from the lungs

______3. To open all airways within lungs

______4. To supplement available oxygen

______5. To bring up secretions in the respiratory tree

a. Continuous positive pressure breathing
b. Coughing
c. Deep breathing exercises
d. Encourage bed rest
e. Encourage fluid intake

______6. To clear secretions from the airway

______7. To liquify secretions

______8. To discourage pooling of secretions

______9. To promote lung expansion

f. Heat packs

g. Incentive spirometry

h. Jogging in place

i. Oxygen

j. Positioning

k. Postural drainage

l. Suctioning

m. Turning

OBJECTIVE 9

Choose the word or phrase to complete statements about nursing interventions that increase respiratory efficiency. Write the correct letter in the blank.

______1. The major goal of most nursing interventions involving respiratory assistance is to ___.

a. keep the patient comfortable
b. reduce energy requirements
c. keep the airway open
d. increase respirations

______2. The nurse could help maintain respiratory function in a post-operative patient after abdominal surgery by ___.

a. carrying out postural drainage
b. administering high concentrations of oxygen
c. providing a cough pillow
d. encouraging bedrest

______3. The respiratory treatment which would increase lung expansion and loosen secretions would be ___.

a. change of position
b. administration of oxygen
c. sustained deep endotracheal suctioning
d. intermittent positive pressure breathing

______4. When the patient is having difficulty breathing, the nurse would most likely place the patient in a/an ___.

a. trendelenburg position
b. orthopneic position
d. sim's position
e. genupectoral position

______5. If a patient is too weak to cough effectively, the nurse would most likely have to ___.

a. suction the patient
b. monitor IV fluids
c. turn the patient every four hours
d. assist the patient with incentive spirometry

______6. The nurse could try to prevent pneumonia in the immobile patient by ___.

a. providing oxygen
b. suctioning the patient
c. turning the patient frequently
d. administering antibiotics

______7. A child with cystic fibrosis receives postural drainage treatments several times a day. The nurse could judge whether a treatment was effective if the child ___.

a. did not cry during the treatment
b. coughed up secretions after the treatment
c. requested oral fluids after the treatment
d. required oxygen during the treatment

______8. The patient who has thick respiratory secretions might be helped most by ___.

a. increased amount of oral fluids
b. decreased oxygen liter flow
c. the orthopneic position
d. incentive spirometry

OBJECTIVE 10

Select guidelines for administering oxygen. Write the correct letter in the blank.

______1. If a patient displayed a rapid pulse; shallow, rapid respirations; anxiety and cyanosis, the nurse should suspect ___.

a. pain
b. medication overdose
c. arteriosclerotic heart disease
d. hypoxemia

______2. The method of providing oxygen which would need the *lowest* liter flow would be the ___.

a. simple mask
b. oxygen hood
c. mist tent
d. nasal cannula

______3. All methods of administering oxygen are meant to raise the concentration of available oxygen above that of room air. That means the oxygen concentration must be raised above ___.

a. 10%
b. 21%
c. 49%
d. 80%

______4. Which action of the nurse might be a safety hazard when oxygen is being administered? The nurse ___.

a. provides a warm wool blanket
b. replaces the patient's nylon gown with one made of cotton
c. posts "NO SMOKING" signs
d. applies a water-based lubricant to the patient's lips

______5. When the patient receiving oxygen by nasal cannula increases the liter flow from 3 to 8 liters, the nurse should ___.

a. tell the patient not to do the respiratory therapist's work
b. understand that the patient needs more oxygen

c. explain the dangers of oxygen toxicity to the patient
d. administer medication to slow respirations

______6. The patient who is receiving oxygen would be most likely to develop problems with ___.

a. fluid balance
b. boredom due to immobility
c. edema of the lower extremities
d. skin contacting the delivery device

______7. The patient may not receive the correct concentration of oxygen if ___.

a. movement is not limited
b. connecting tubing becomes kinked
c. liter flow is not kept above 5
d. oxygen is humidified

______8. The statement in a patient's chart that describes the delivery of oxygen correctly is ___.

a. oxygen per nasal cannula at 3 liters per minute
b. oxygen per mask at 50 degrees
c. oxygen per nasal cannula at 40 cm. per hour
d. oxygen per mask at 70 pounds pressure

OBJECTIVE 11

Match oxygen sources with their descriptions. Write the letter of the correct answer in the blank.

______1. Portable without being a compressed gas

______2. Operates with electricity

______3. Found in most hospitals

______4. Usual source in nursing homes

a. Cylinder

b. Liquid

c. Oxygen concentrator

d. Piped-in

e. Nasal cannula

f. Oxygen hood

OBJECTIVE 12

Match methods of administering oxygen to their descriptions.
Write the correct letter in the blank.

Part 1

_______1. Enables a patient to ambulate freely, provides a low concentration (23-44%), and has a liter flow of 1-6 l/m

_______2. Used to administer oxygen through a tracheostomy or endotracheal tube

_______3. Used to supply oxygen and increased humidity to a patient who has a tracheostomy

_______4. Delivers a precise concentration of oxygen, from 24-50%; often used for patients with COPD; liter flow is 4-8 l/m

_______5. Similar to a mask, but does not fit tightly against the face; may be used with a Venturi attachment; oxygen concentration is 30-55%, liter flow is 8-10 l/m

a. Face tent
b. Mist tent
c. Nasal Cannula
d. Nonrebreathing mask
e. Oxygen hood
f. Oxygen tube
g. Partial mask
h. Partial rebreathing mask
i. S-tube
j. Simple mask
k. T-tube
l. Trach collar
m. Trach mask
n. Venturi mask

1964

Part 2

_____1. Has a reservoir bag and a one-way valve, delivers high concentration of oxygen (60-90%), liter flow is 6-15 l/m

_____2. Requires a liter flow of 5-8 l/m, delivers a concentration of 40-60%

_____3. Used for infants; concentrations greater than 40% can lead to increased blood concentrations over time, resulting in blindness

_____4. Has a reservoir bag and a two-way valve, oxygen concentration is 35-60%, liter flow is 6-10 l/m

_____5. Used to deliver oxygen and humidity to children, oxygen concentrations are 30-50%, 10-15 l/m

a. Face tent

b. Mist tent

c. Nasal cannula

d. Nonrebreathing mask

e. Oxygen hood

f. Oxygen tube

g. Partial mask

h. Partial rebreathing mask

i. S-tube

j. Simple mask

k. T-tube

l. Trach collar

m. Trach mask

n. Venturi mask

NOTICE The following job sheets are not part of the Written Test. If they have not been completed, check with your instructor.

OBJECTIVE 13 **Demonstrate the ability to:**

a. Collect a throat culture. RATING _____

b. Collect a sputum specimen. RATING _____

c. Assist with/induce deep breathing/coughing exercises. RATING _____

d. Position patient in orthopneic position. RATING ______

e. Suction oronasal tract. RATING ______

f. Use piped-in (wall) oxygen. RATING ______

g. Initiate and maintain an oxygen cylinder. RATING ______

h. Use a nasal cannula. RATING ______

i. Use an oxygen mask. RATING ______

OBJECTIVE 1

Part 1

1. i
2. e
3. m
4. f
5. k
6. a
7. l
8. b
9. d

Part 2

1. i
2. c
3. l
4. b
5. e
6. k
7. j
8. f
9. d

Part 3

1. h
2. m
3. b
4. c
5. k
6. e
7. f
8. d
9. g

OBJECTIVE 2

- Pulmonary ventilation or the transfer of air between the lungs and the environment
- Exchange of oxygen and carbon dioxide between the pulmonary capillaries and the alveoli
- Transportation by the blood of oxygen to and carbon dioxide from all cells

OBJECTIVE 3

1, 3, 4, 6, 7, 8, 10, 11

OBJECTIVE 4

1. d
2. c
3. d
4. b
5. b
6. a
7. c
8. d

1967

OBJECTIVE 5

1. c
2. b
3. d
4. c
5. a
6. b

OBJECTIVE 6

1. d
2. b
3. c

OBJECTIVE 7

1. e
2. g
3. a
4. d
5. b

OBJECTIVE 8

1. g
2. k
3. c
4. i
5. b
6. l
7. e
8. m
9. j

OBJECTIVE 9

1. c
2. c
3. d
4. b
5. a
6. c
7. b
8. a

OBJECTIVE 10

1. d
2. d
3. b
4. a
5. c
6. d
7. b
8. a

OBJECTIVE 11

1. b
2. c
3. d
4. a

OBJECTIVE 12

Part 1

1. c
2. e
3. l
4. n
5. a

Part 2

1. d
2. j
3. e
4. h
5. b

OBJECTIVE 13 Refer to practical test ratings for Job Sheets 1-9.

1969